

Fig. 1

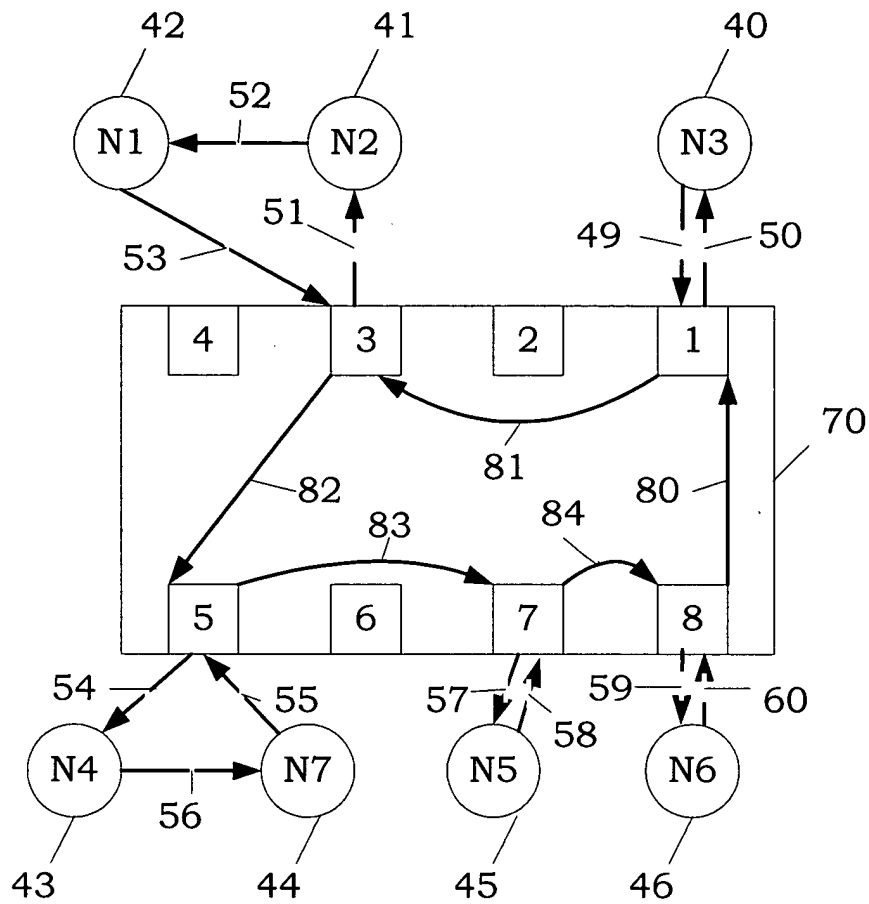
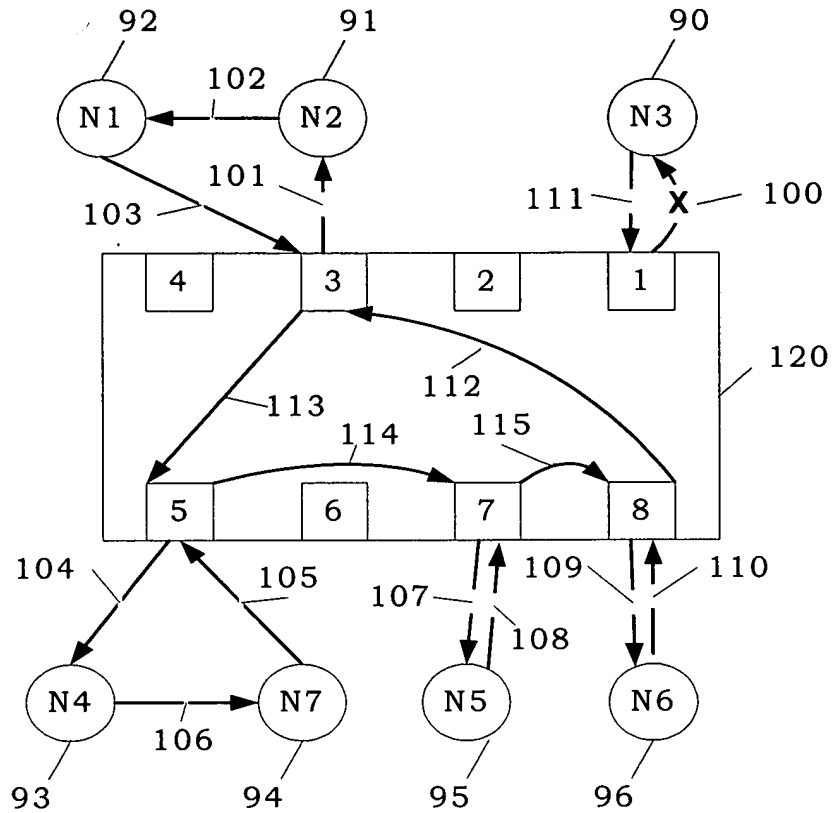


Fig. 2



Fibre Channel Arbitrated Loop Hub

Fig. 3

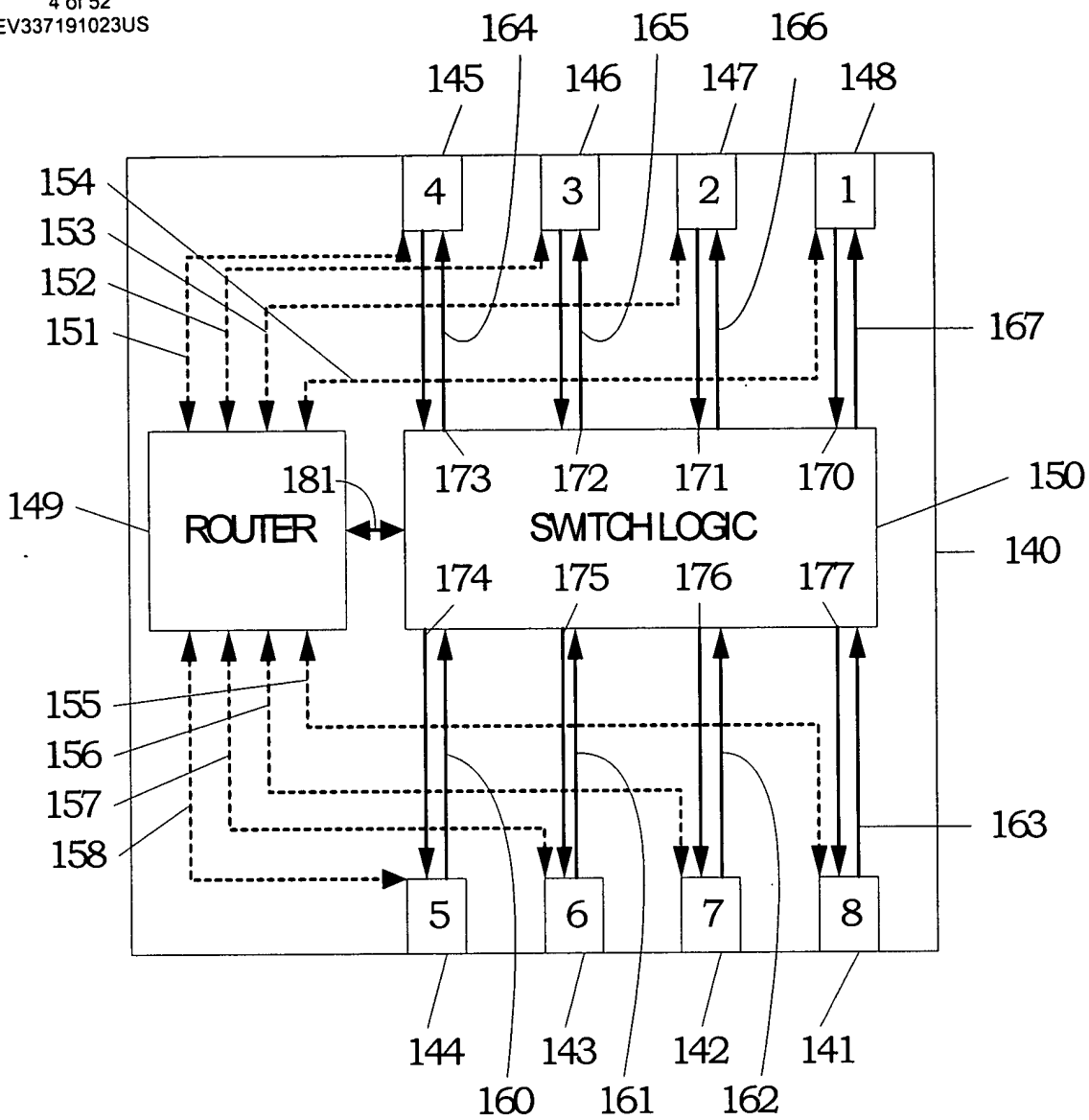


Fig. 4

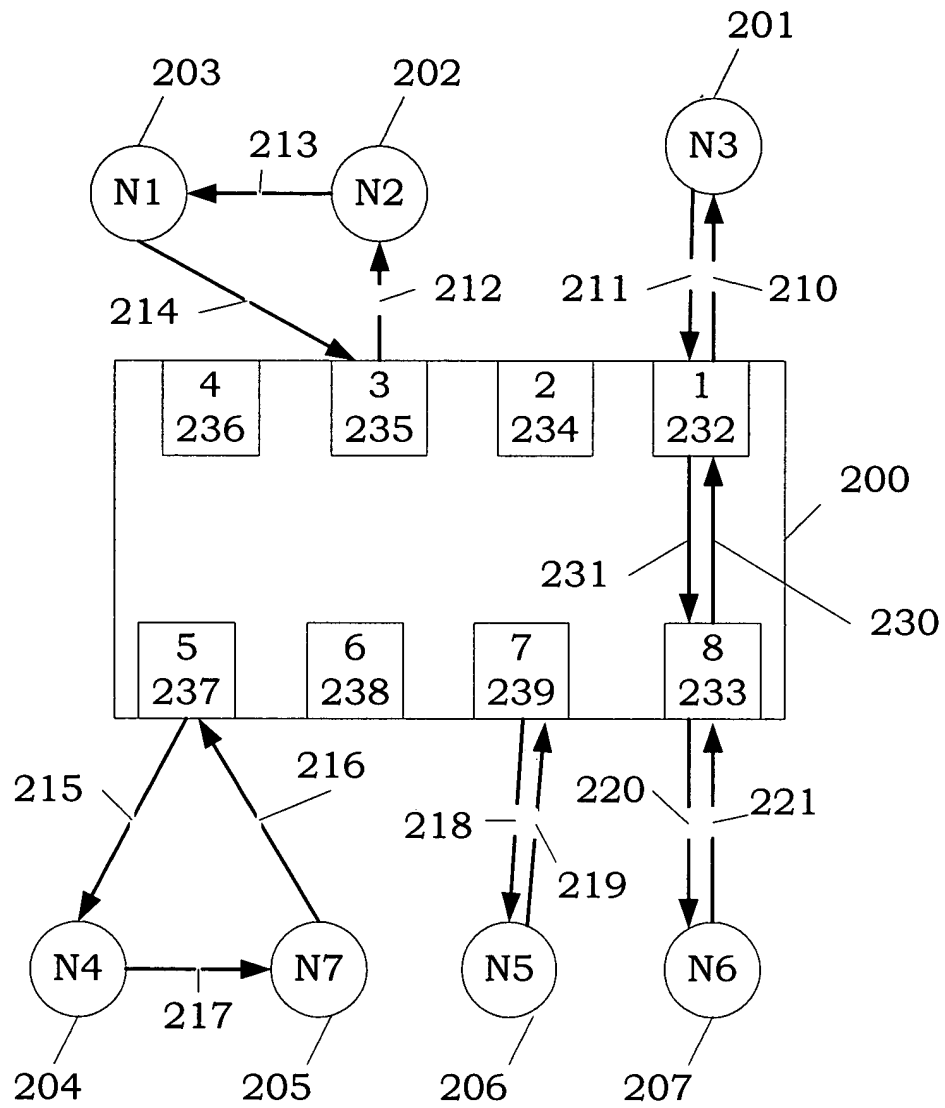


Fig. 5

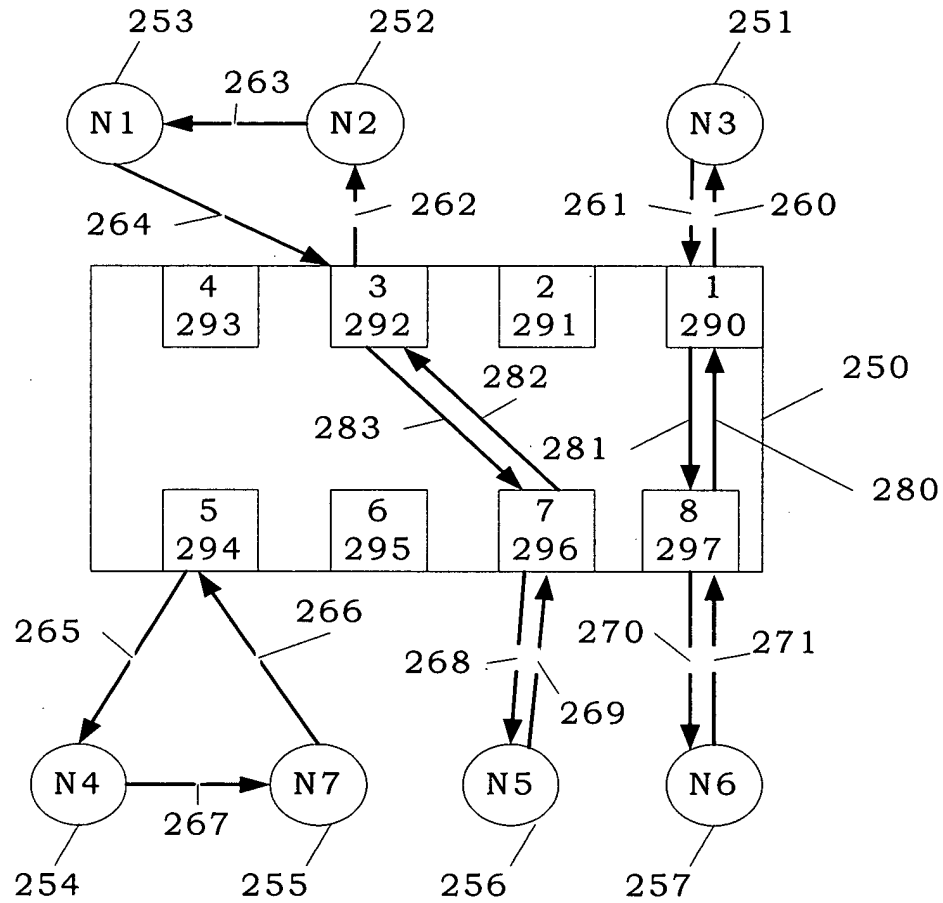


Fig. 6

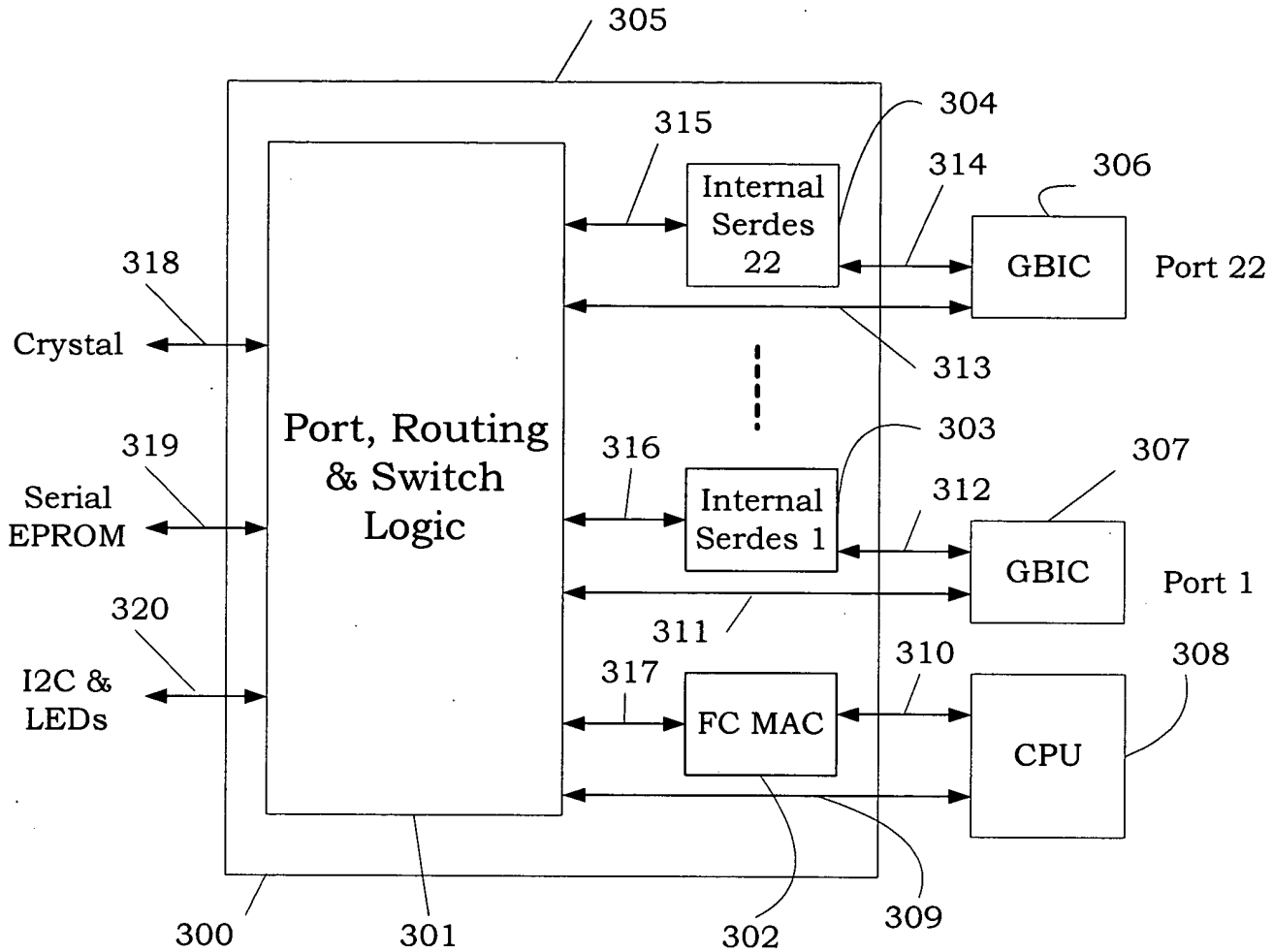


Fig. 7

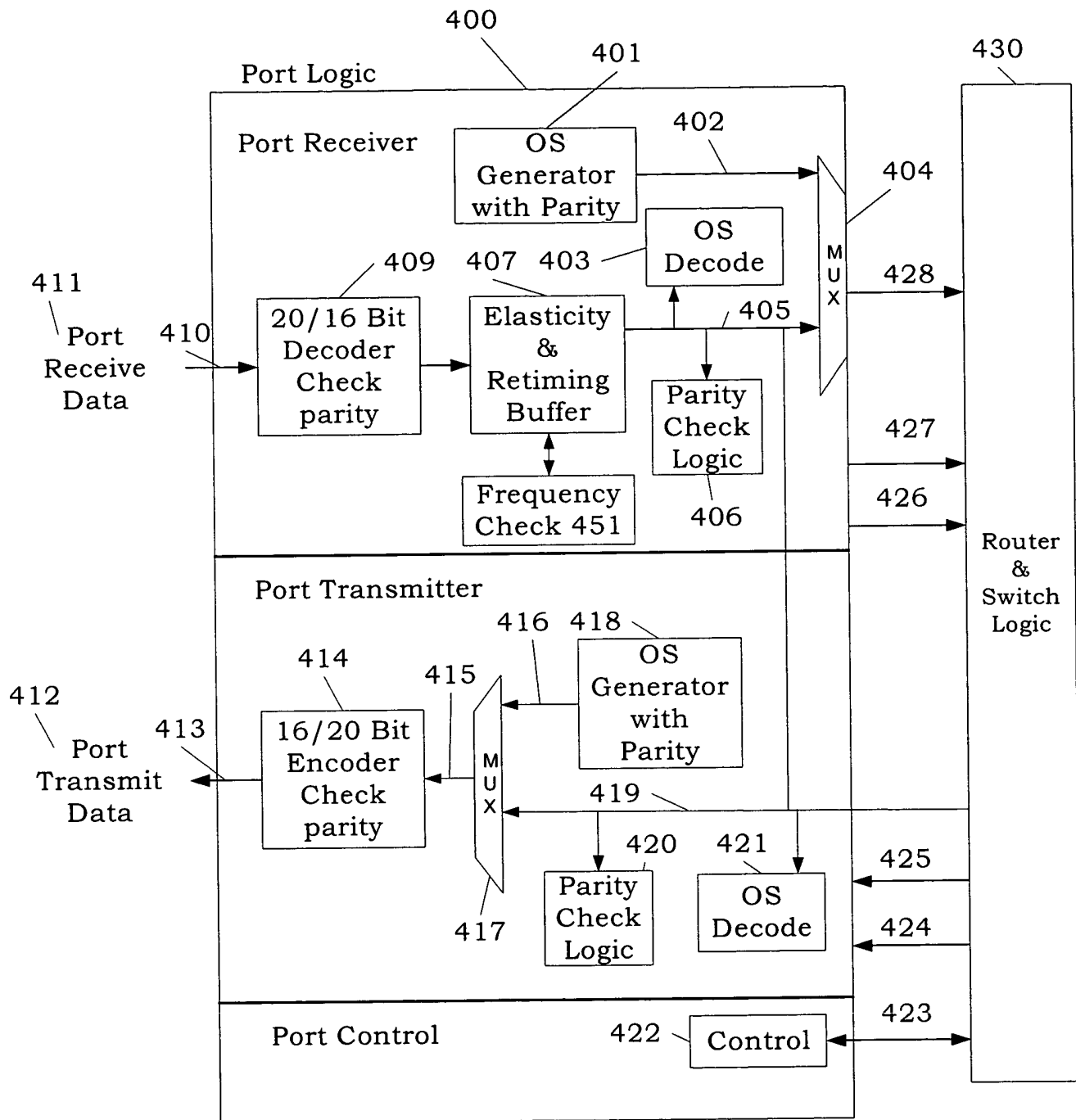


Fig. 8



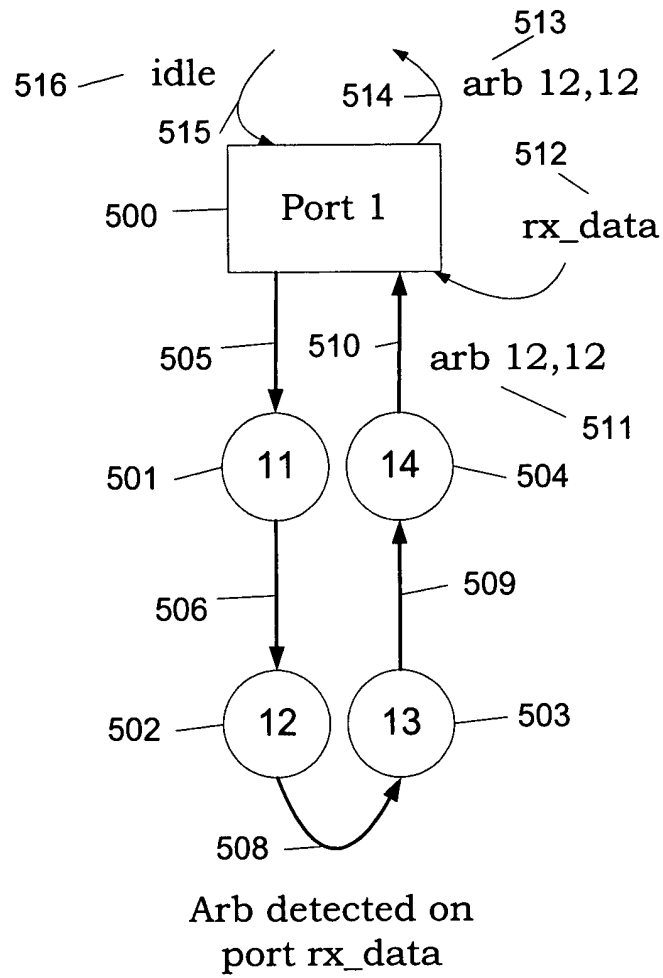
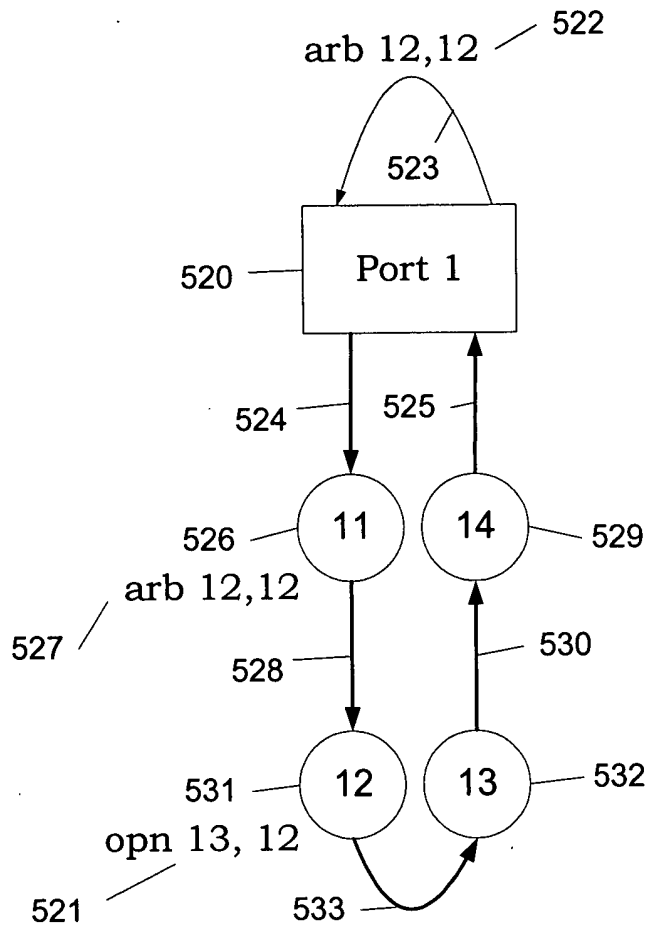
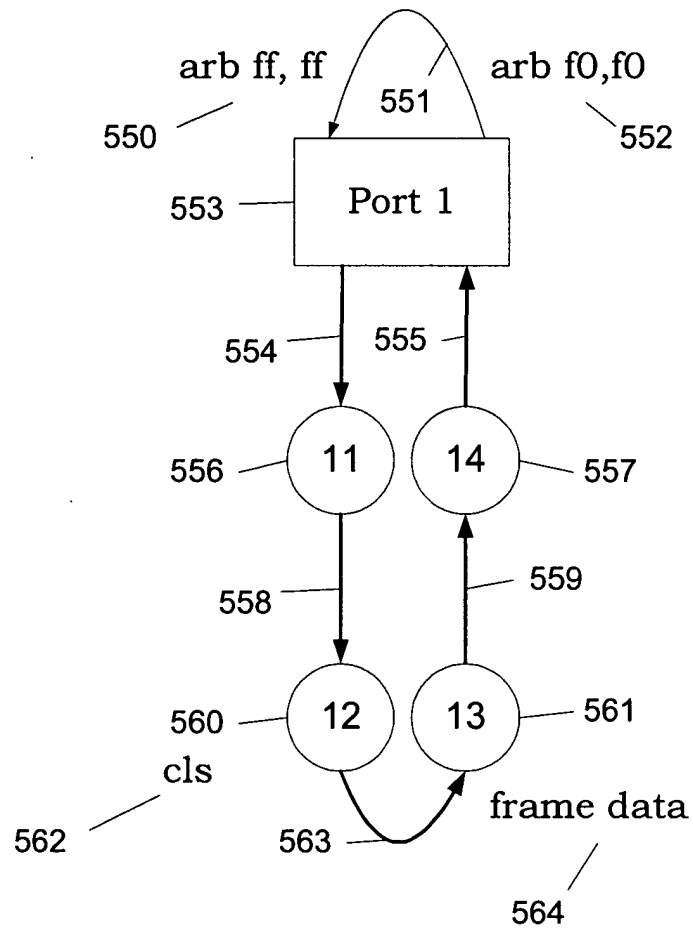


Fig 9a



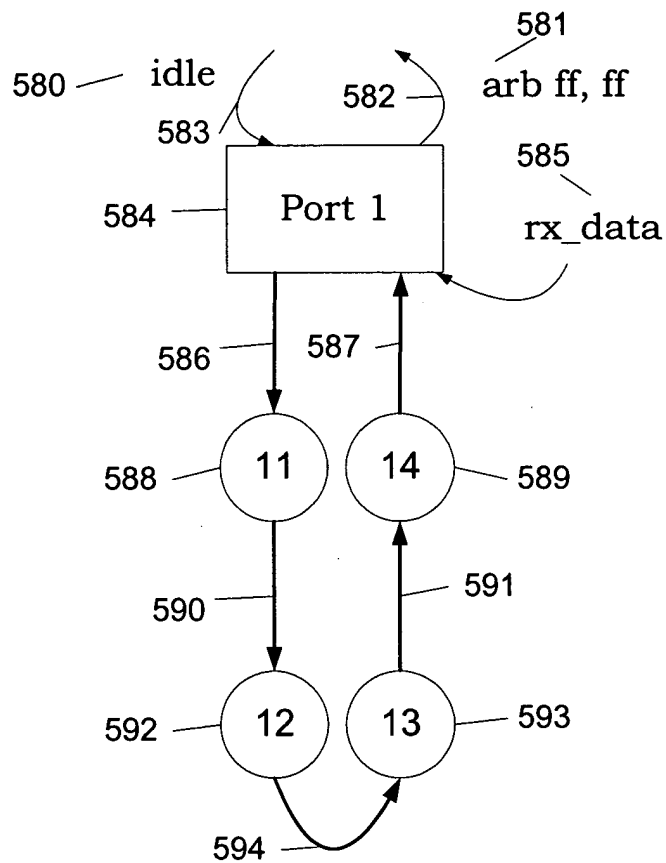
Connection established.  
 Open sourced

Fig 9b



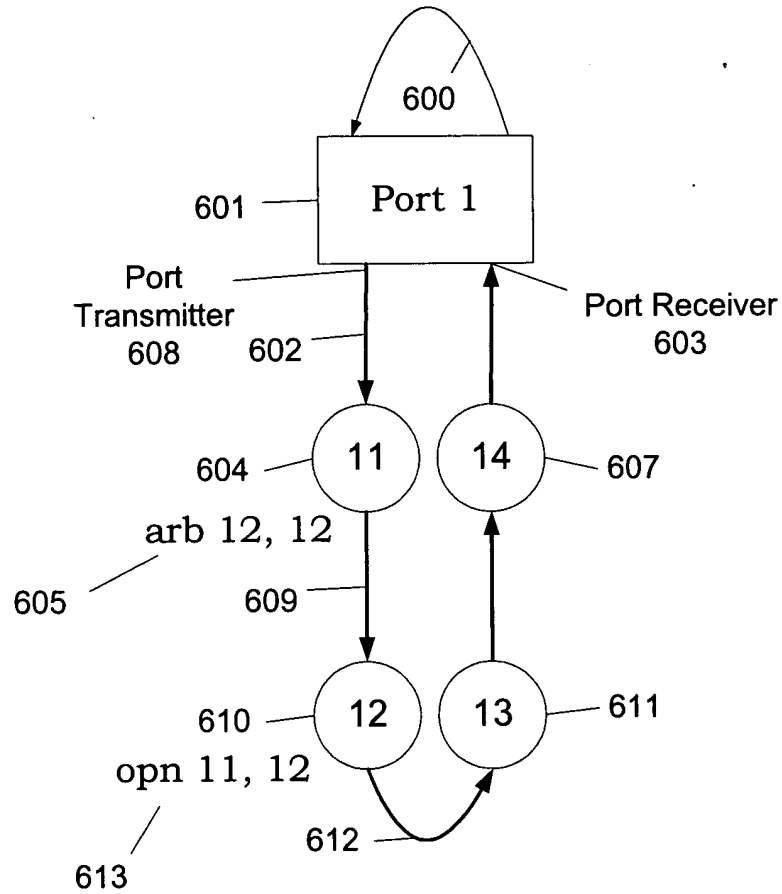
Arbf0 replaced with Arbff. Data Transferred.  
 Close sourced.

Fig 9c



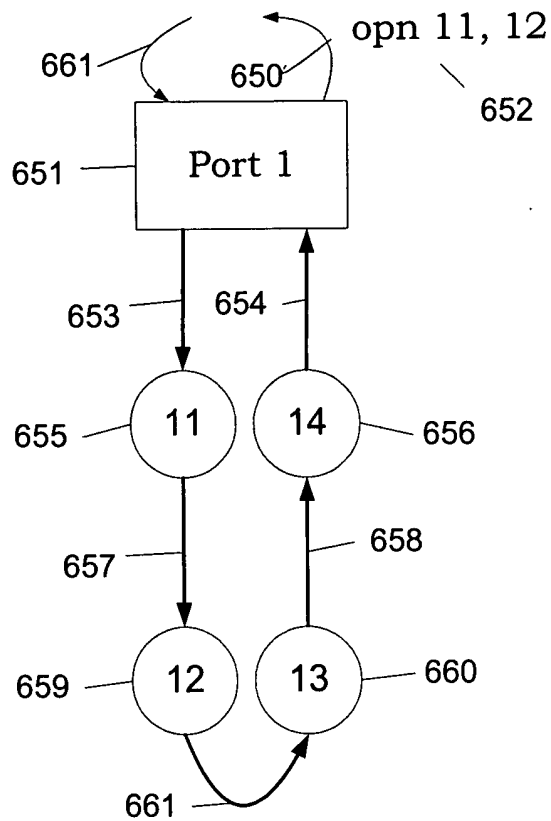
Arbff detected on port rx\_data.  
 Disconnect. Source idles

Fig 9d



Arbs forwarded. Open sourced.

Fig 10a



Open detected at port receiver.  
 Port receiver holds open.  
 Provides ALPA to router and asserts `opn_connect_req`.

Fig 10b

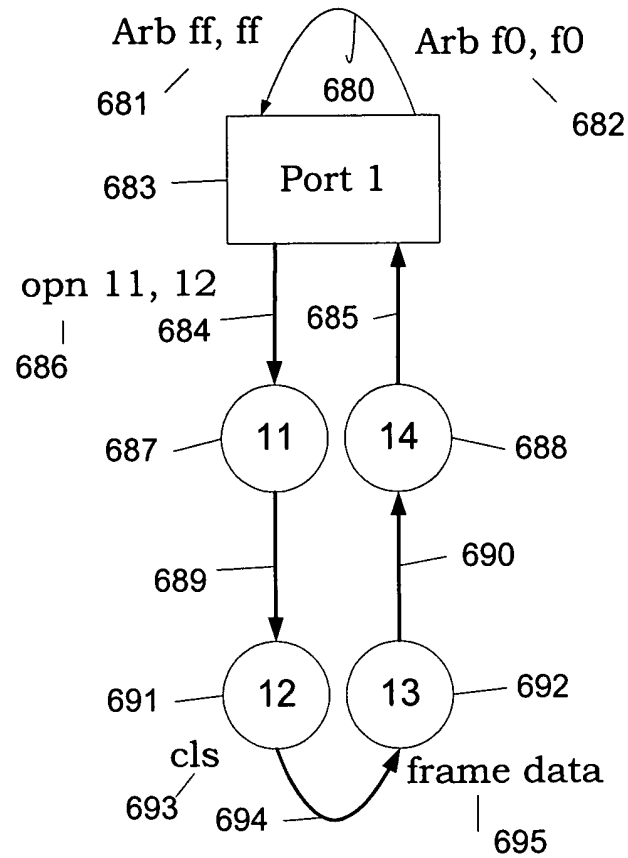
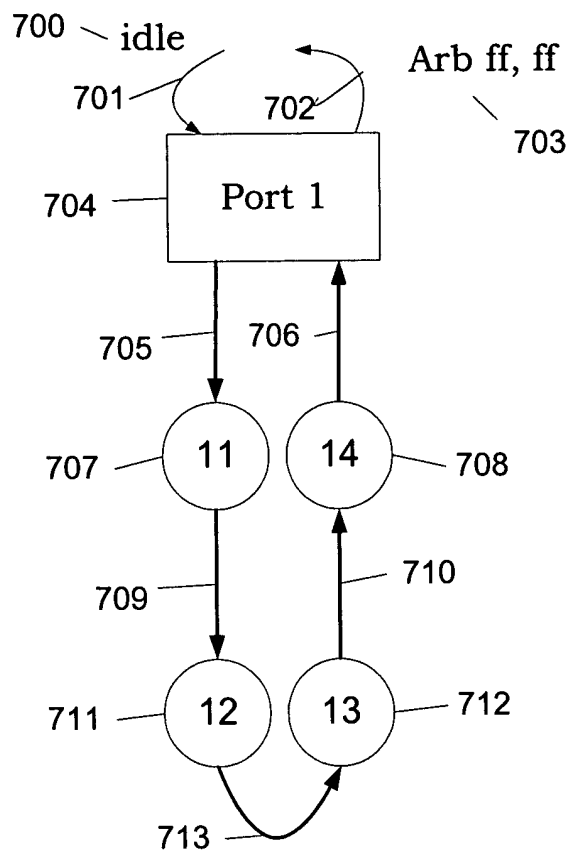


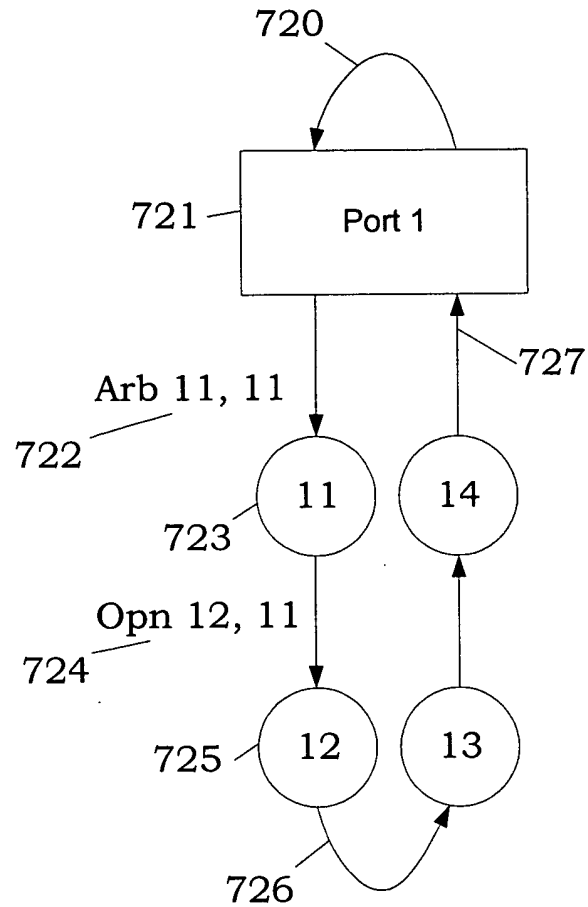
Fig 10c



Arbff detected on port rx\_data. Disconnect. Source idles.

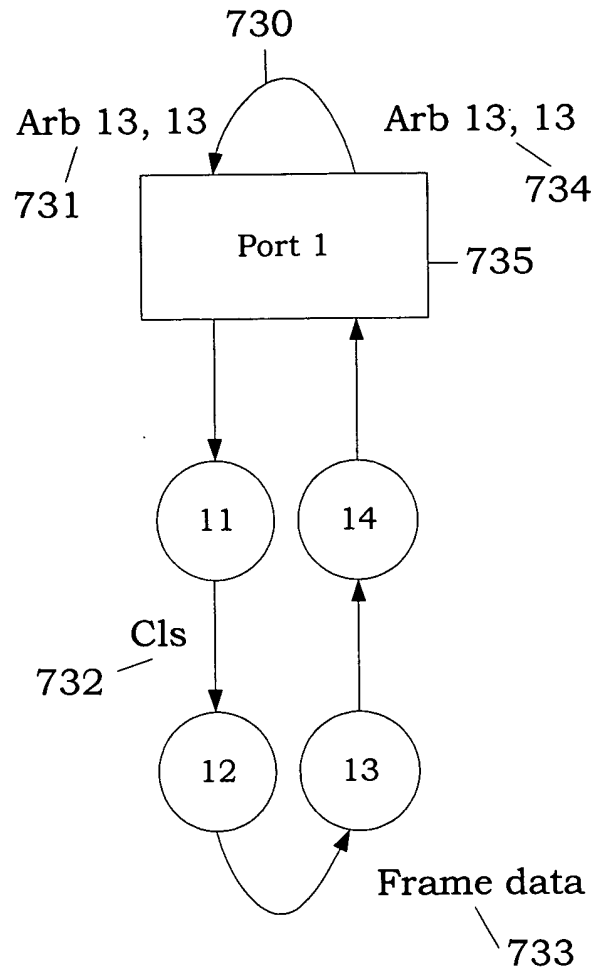
Fig 10d





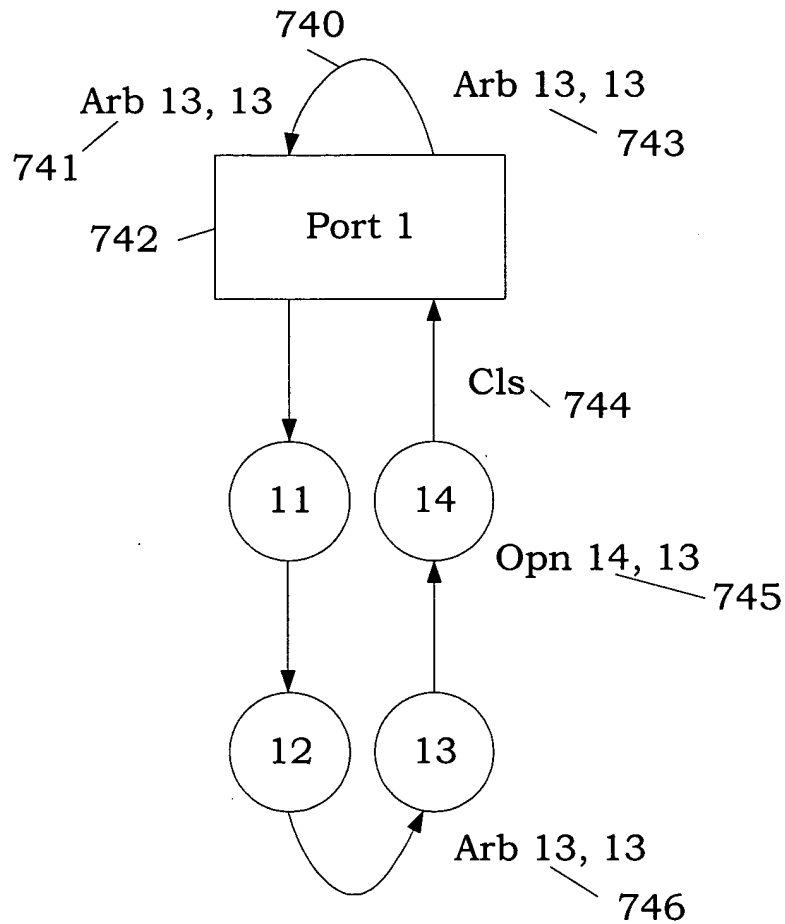
Arbs forwarded.  
Open Sourced.

Fig 11a



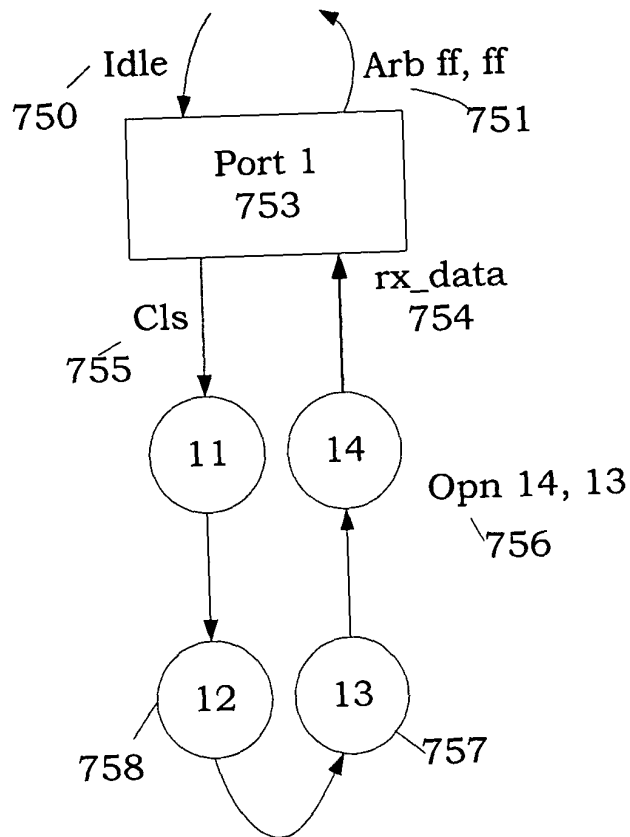
Arb 13 forwarded.  
Data Transferred.  
Close sourced.

Fig 11b



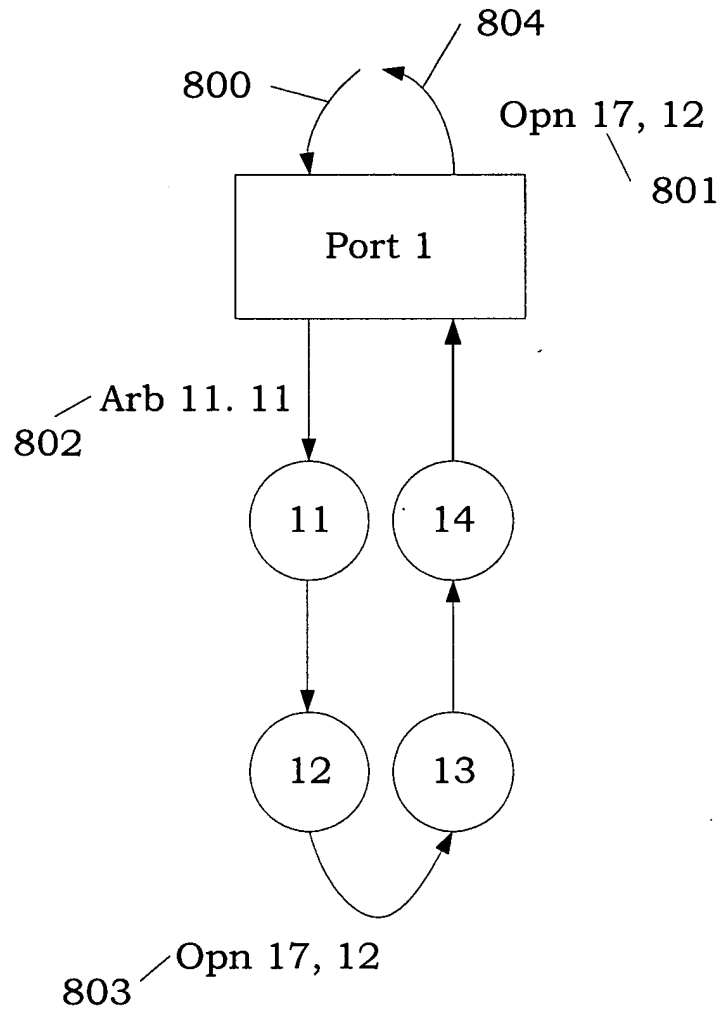
Close forwarded by node 12.  
 Arb 13 received by node 13.  
 Open sourced by node 13.

Fig 11c



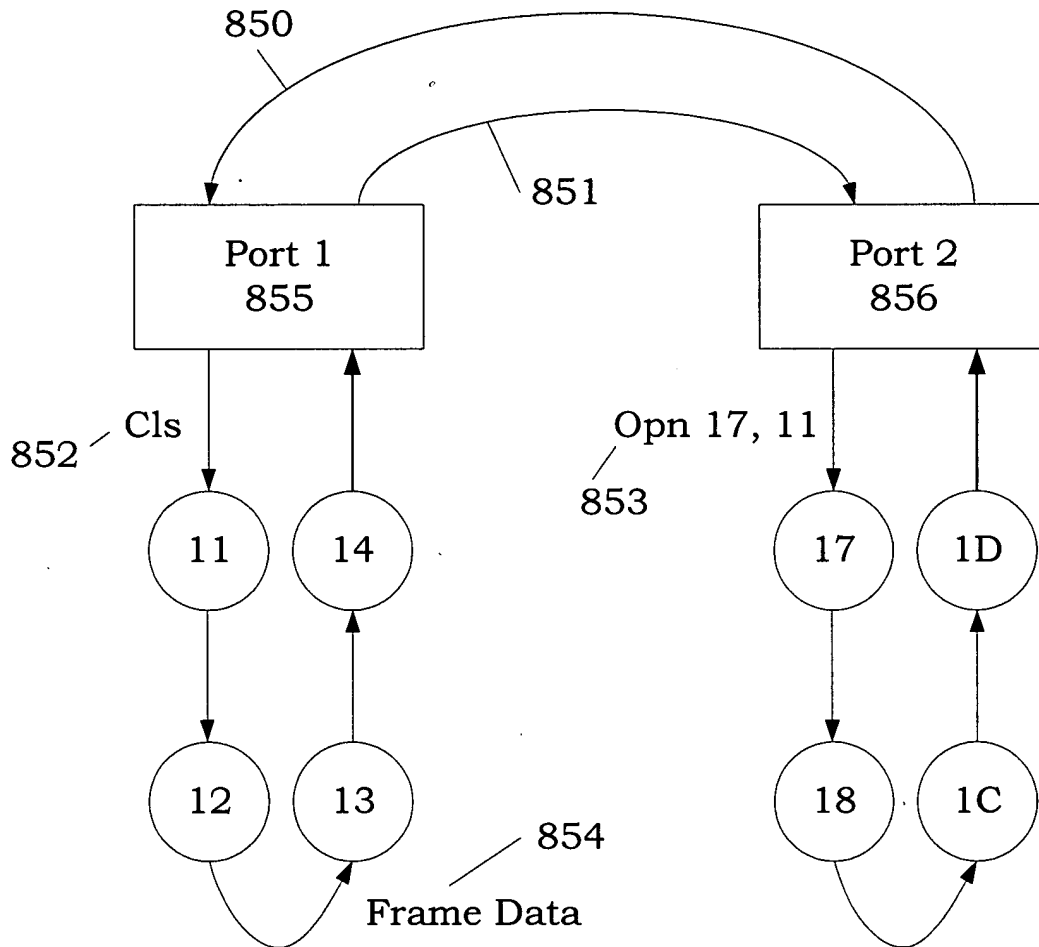
Close source by node 13.  
 Forwarded by node 12.  
 Arb ff Detected on port rx\_data.  
 Disconnect.  
 Source idles.

Fig 11d



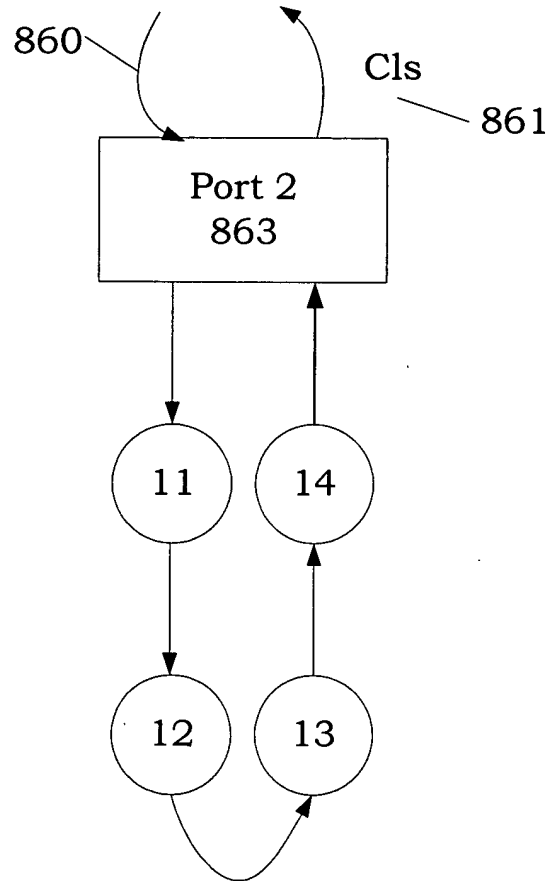
Arbs forwarded.  
Open sourced.

Fig 12a



Open forwarded to Port 2.	Open received from Port 1.
Data transferred.	Data received.
Close sourced.	Close forwarded.

Fig 12b



Close detected at  
transmitter and receiver.  
Connection broken.

Fig 12c

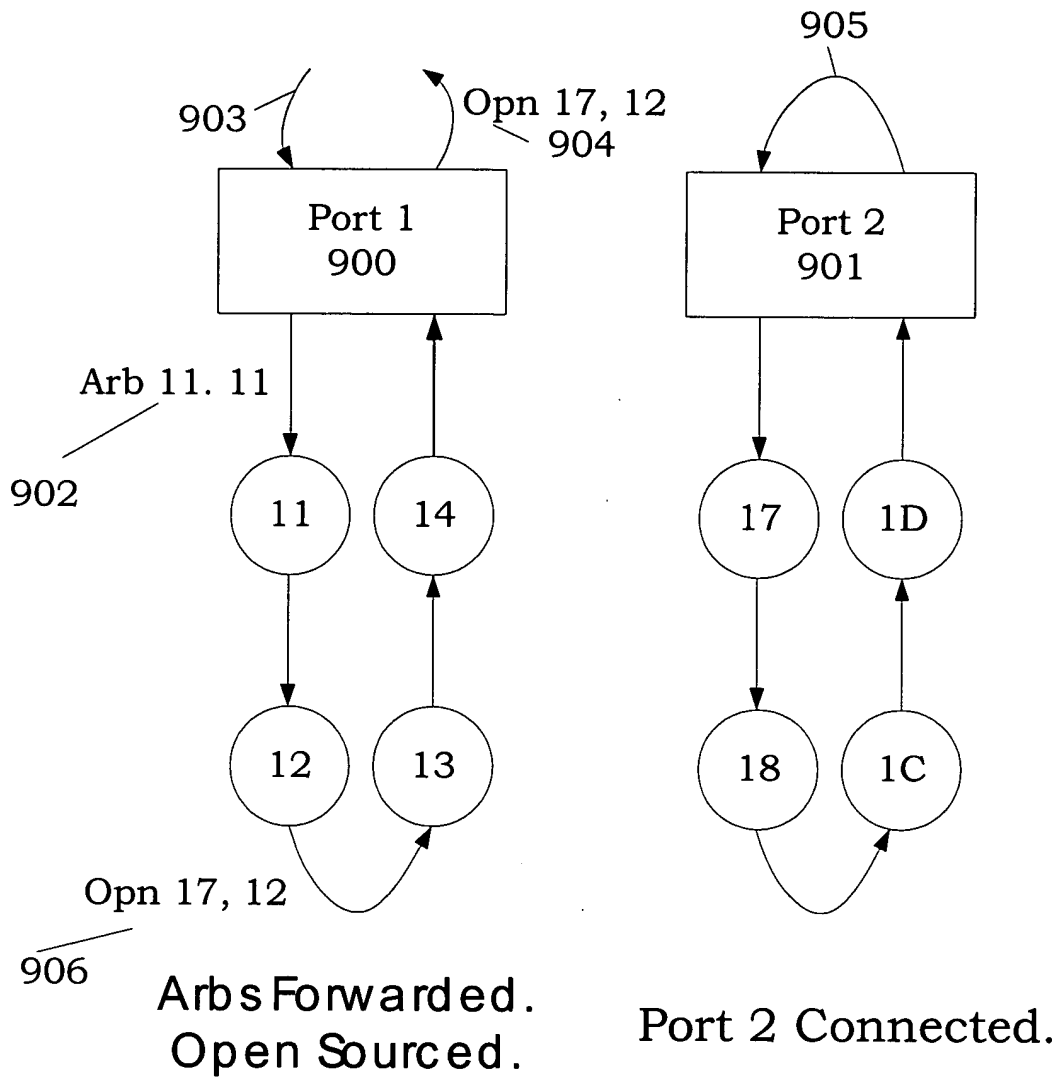
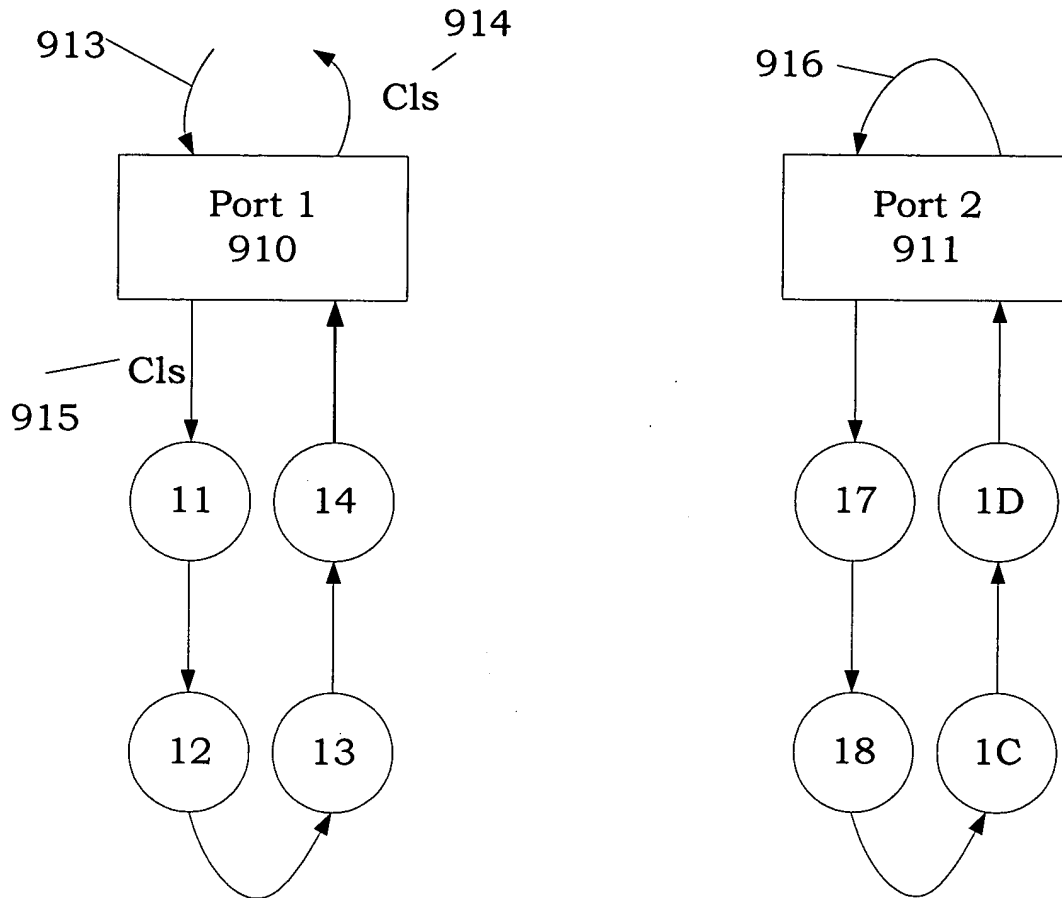


Fig 13a





Cls detected at port receiver  
 from node 12.  
 Cls sourced from port  
 transmitter.

Port 2 still connected.

Fig 13b

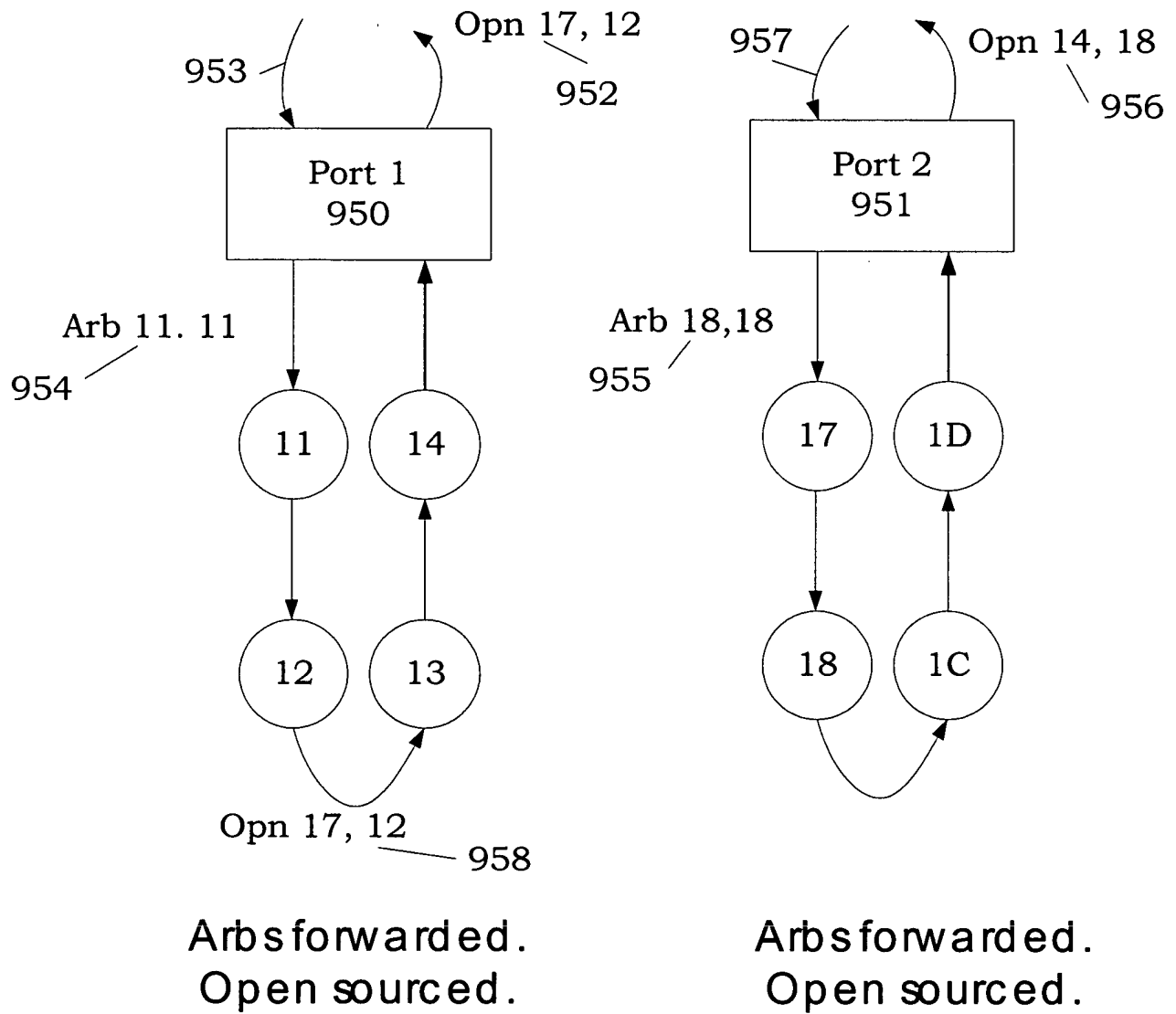


Fig 14a

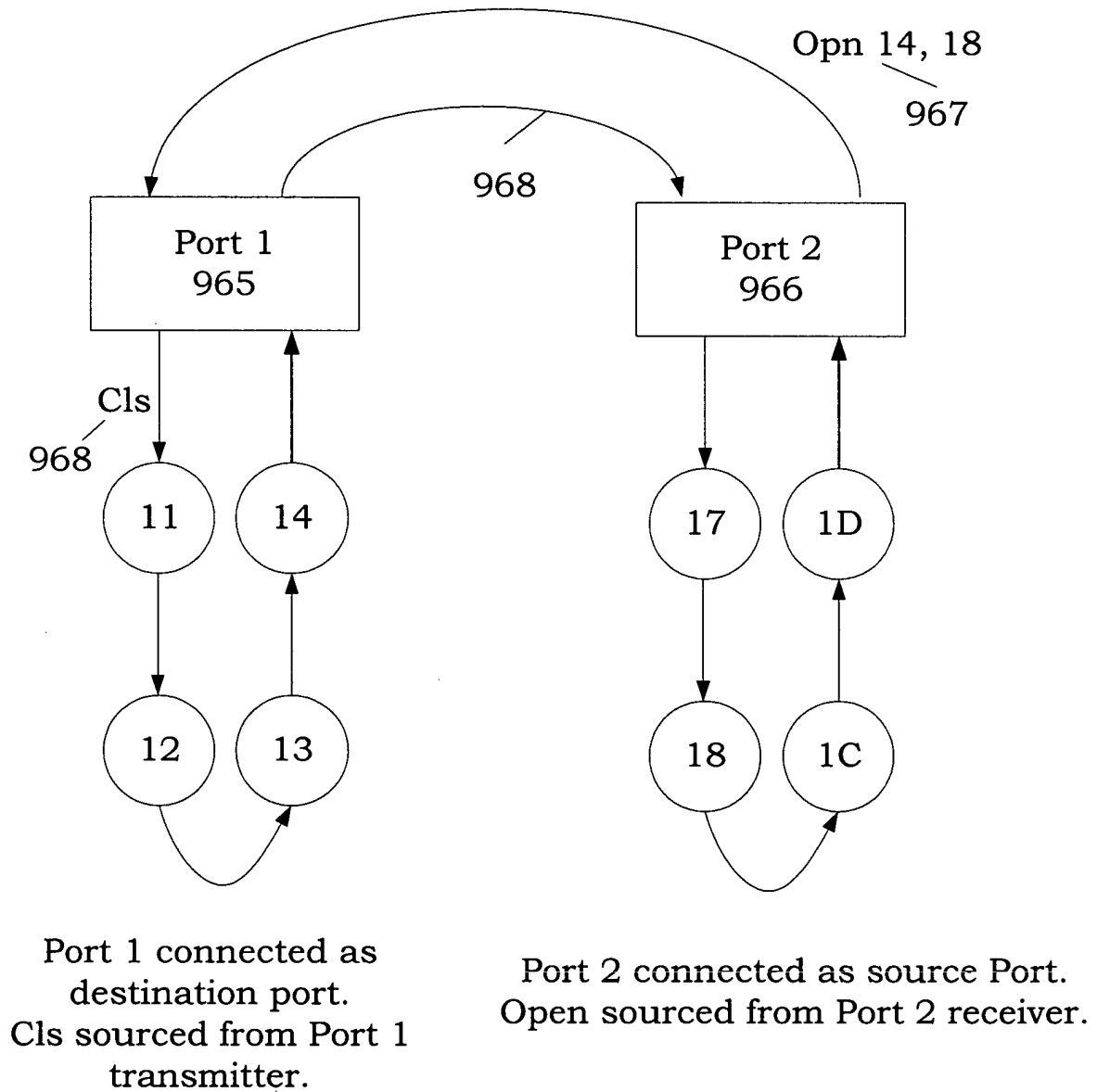
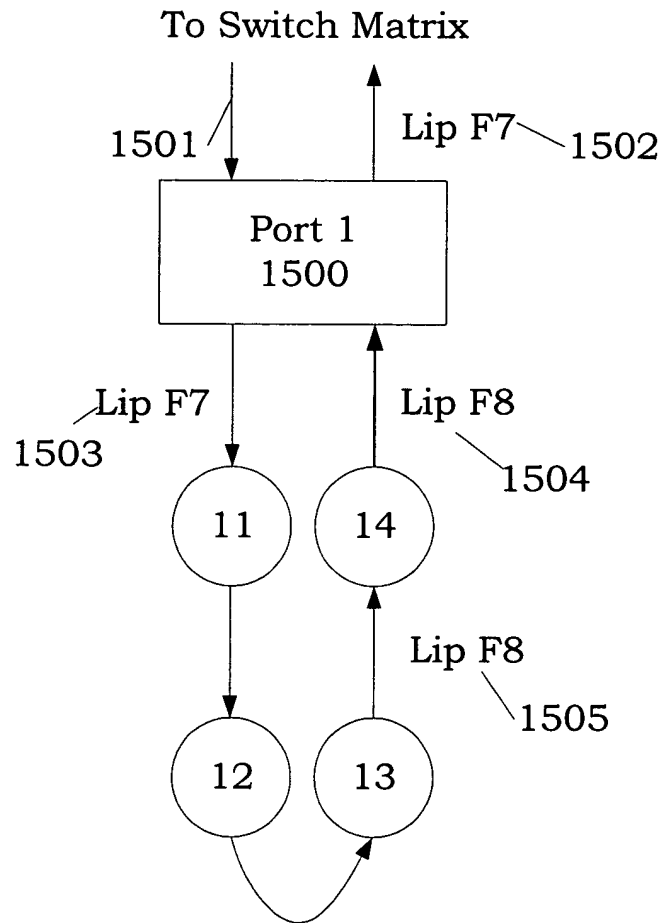


Fig 14b

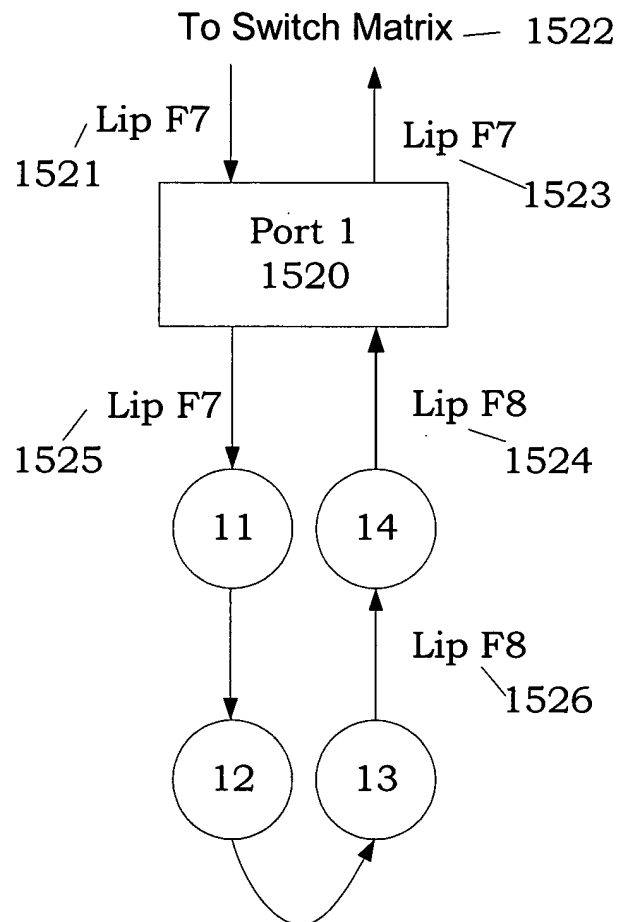
Router detects Lip RX'd signal.  
Router deasserts switched mode signal.



Lip F8 sourced by node 13.  
Lip F8 replaced by Lip F7 at port receiver.  
Lip F7 sourced at port transmitter.

Fig 15a

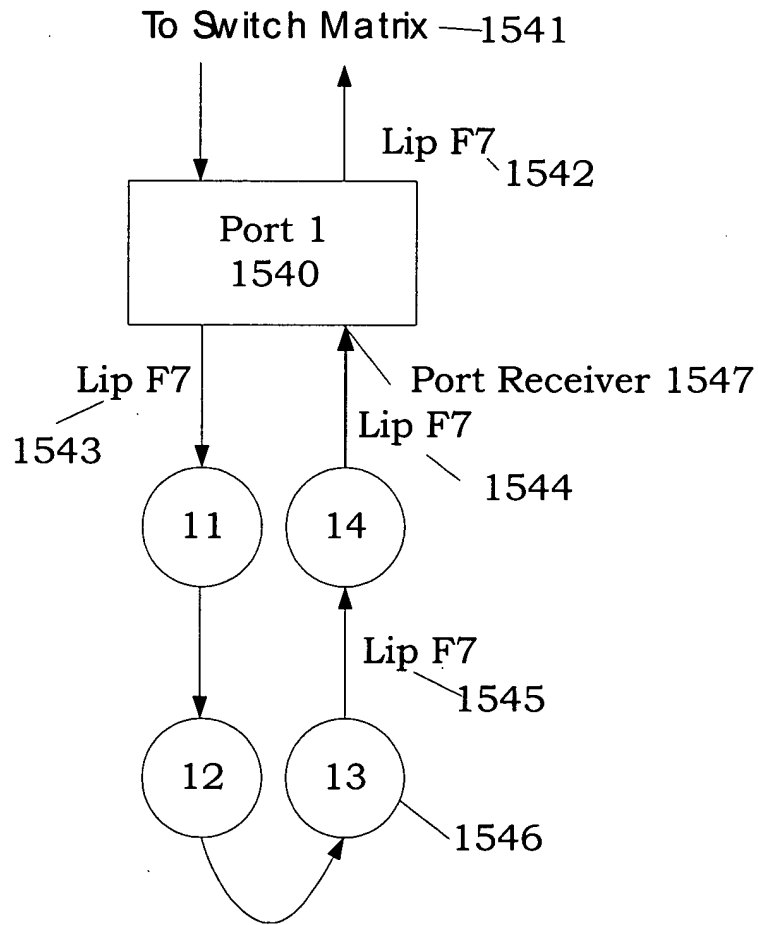
Router detects deassertion of port active.  
 Router takes port out of operational loop.



Lip F7 received at port transmitter.  
 Port deasserts port active signal.

Fig 15b

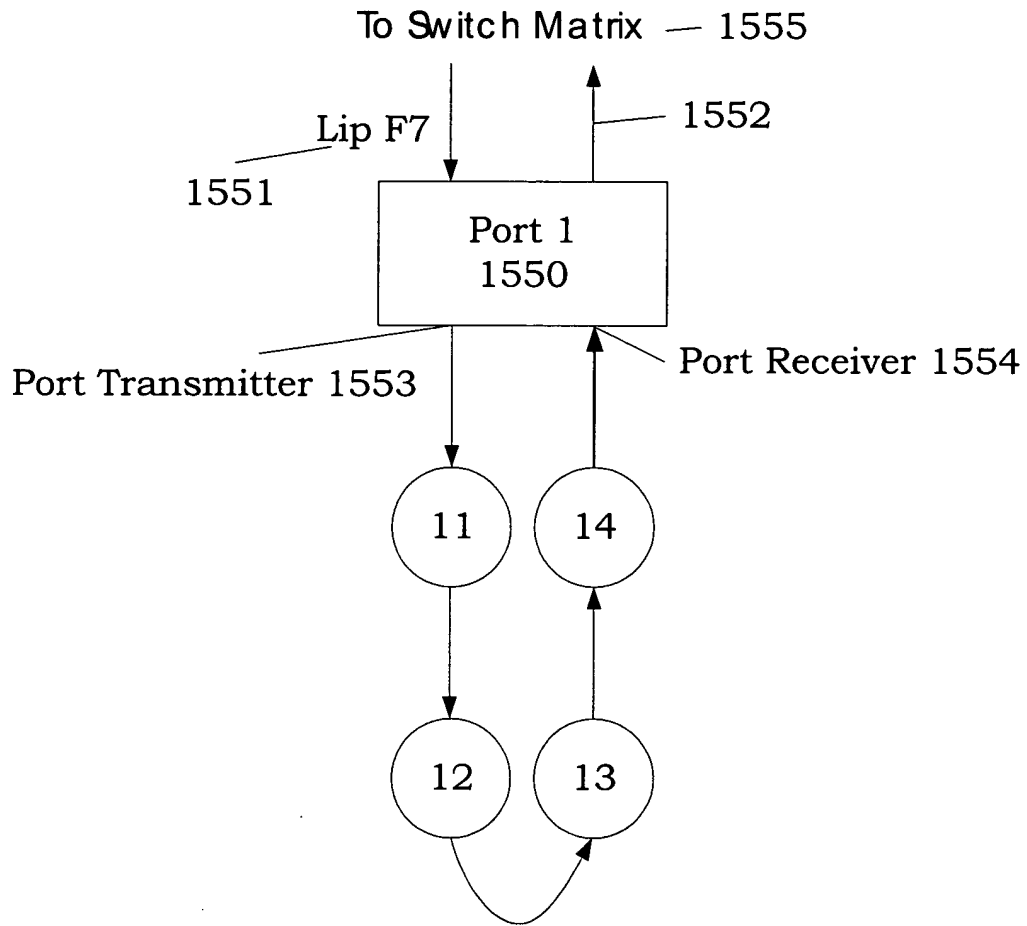
Router detects Lip RX'd signal since port  
 active is now asserted.  
 Router puts port back into the  
 operational loop.



Node 13 "heals", source Lip F7.  
 Lip F7 received at port receiver.  
 Port asserts Port\_Active.

Fig 15c

Router continues with loop  
initialization



Port detects Lip F7 at port transmitter.  
Port stops sourcing Lip F7 at port receiver.  
Port stops sourcing Lip F7 at port transmitter.

Fig 15d

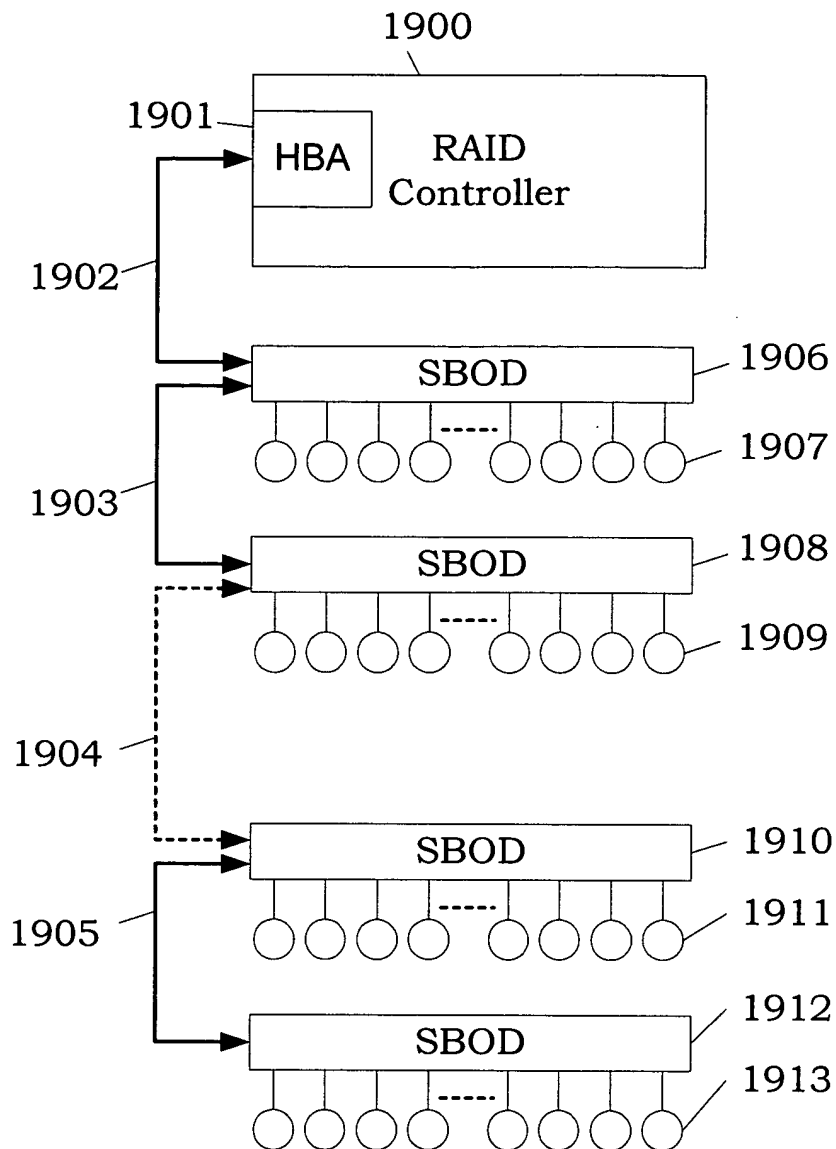


Fig. 16a



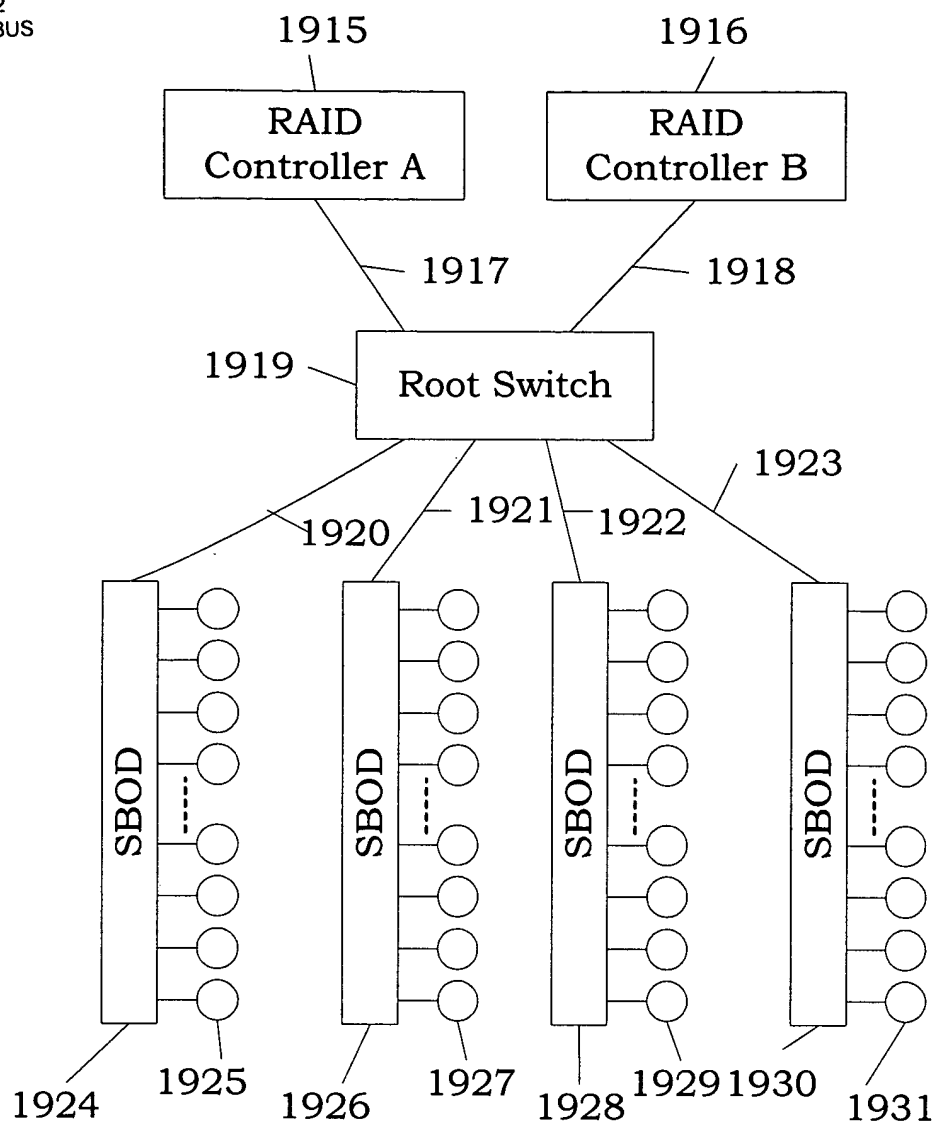


Fig. 16b

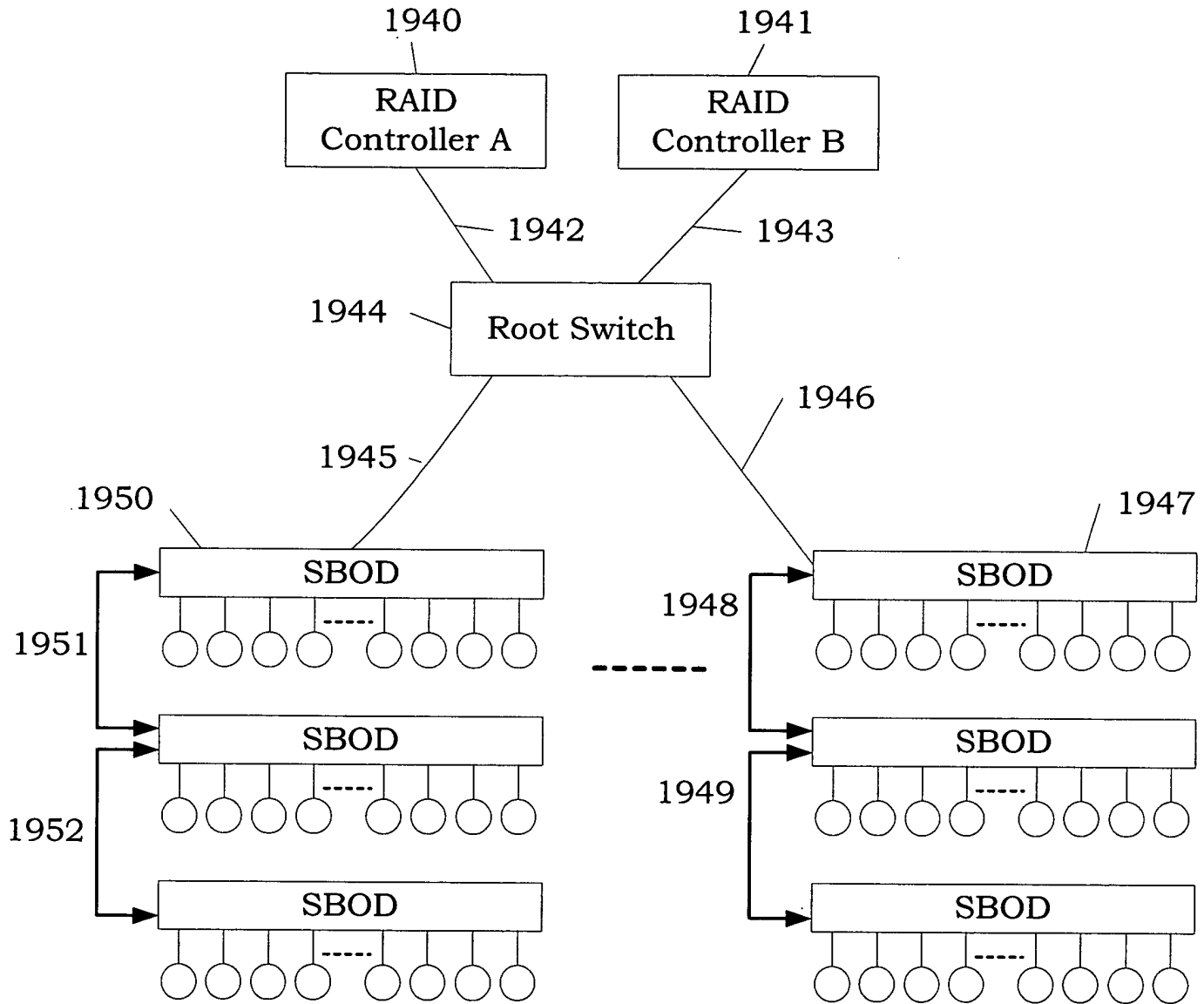


Fig. 16c

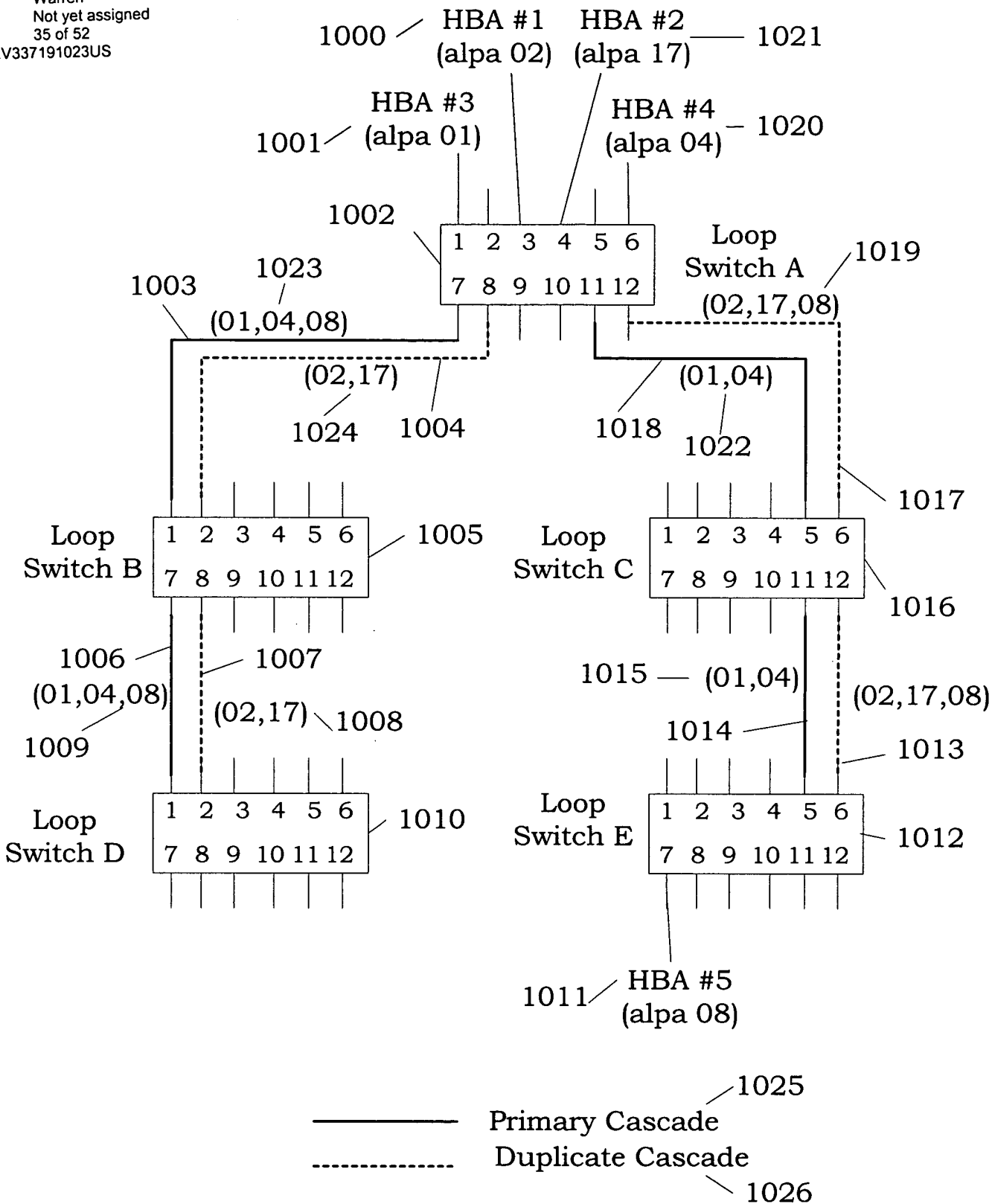
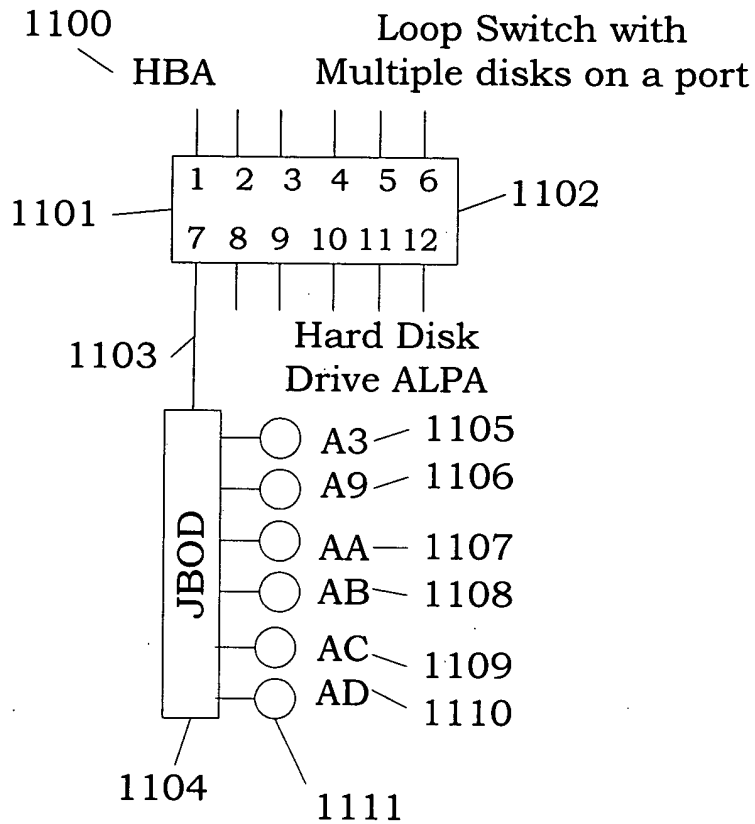
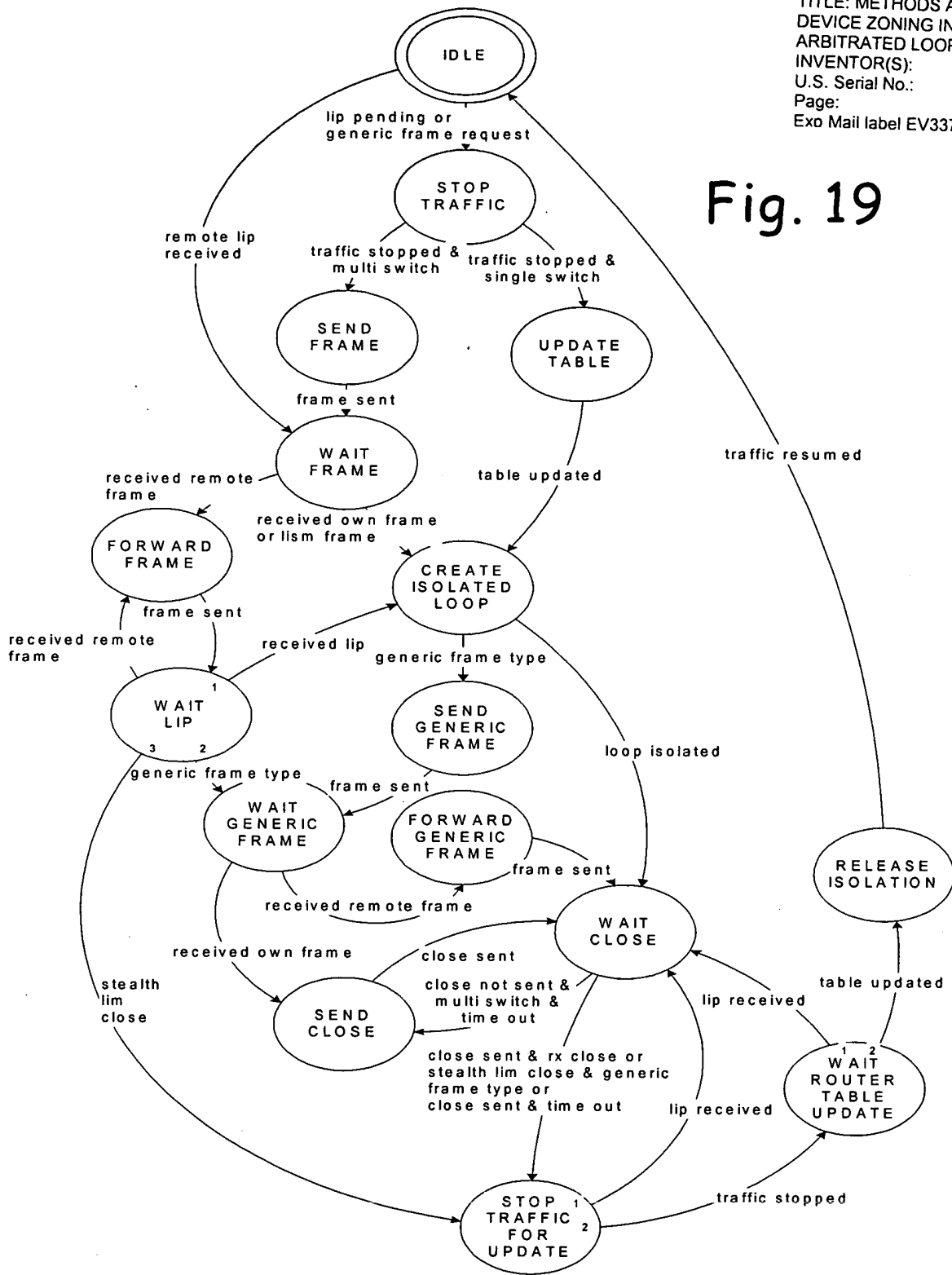


Fig. 17



**Fig. 18**

Fig. 19



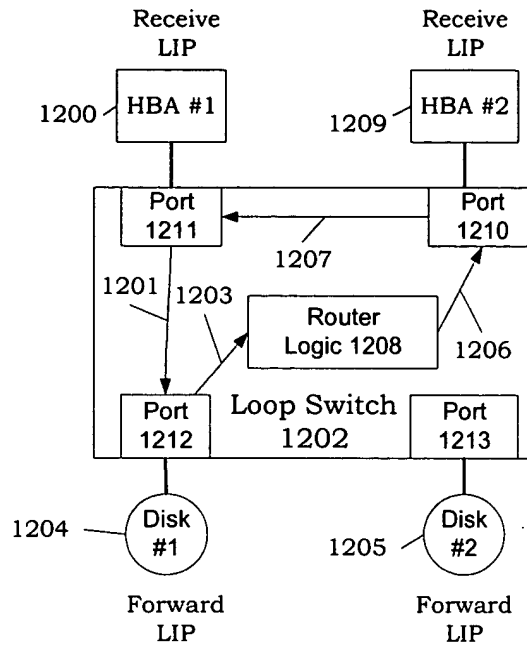


Fig. 20

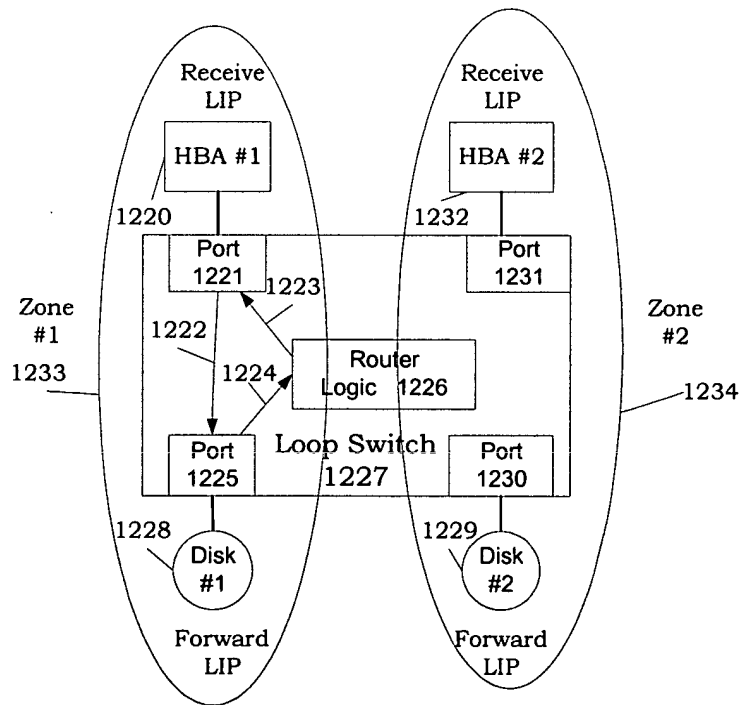


Fig. 21

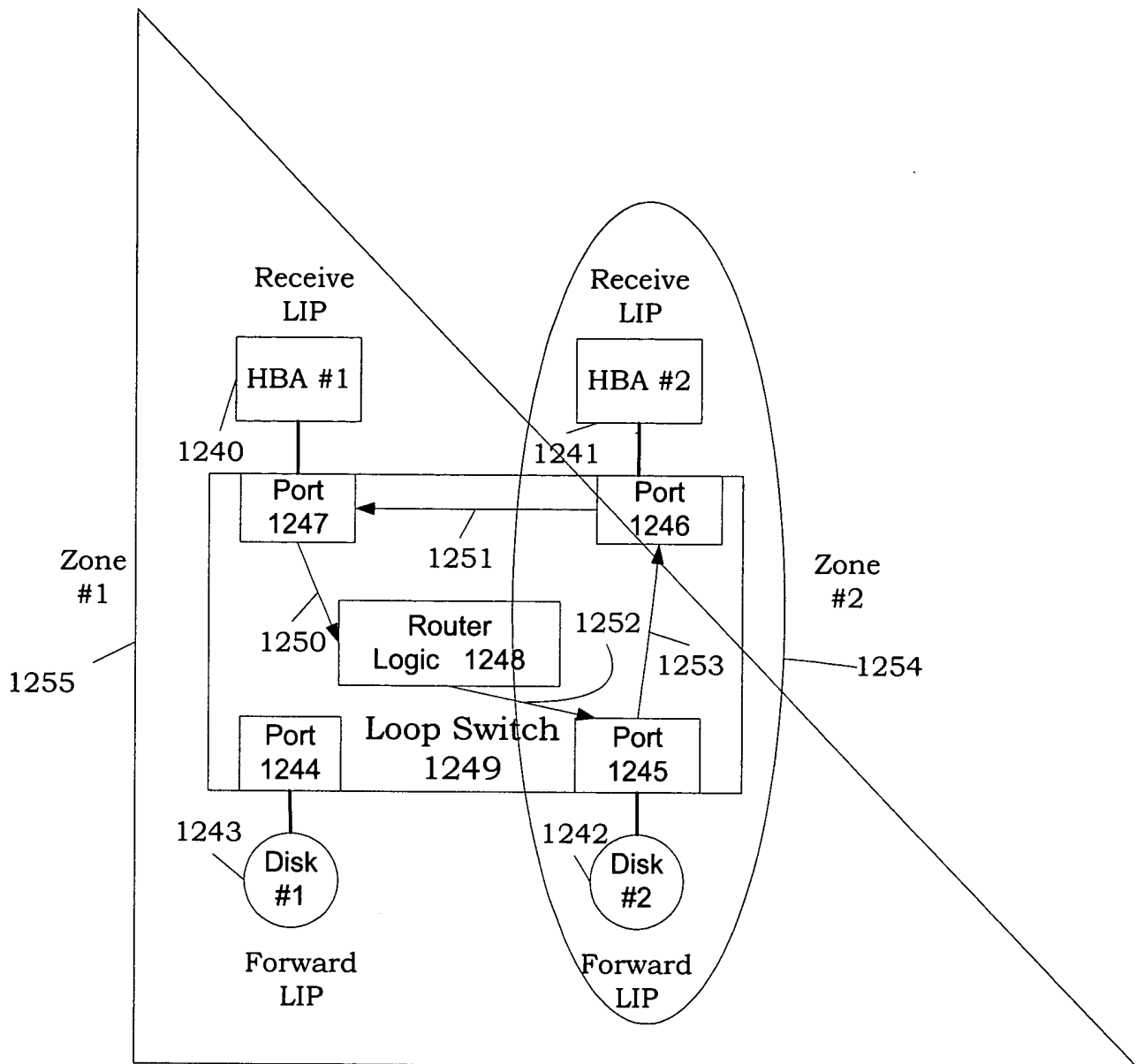


Fig. 22

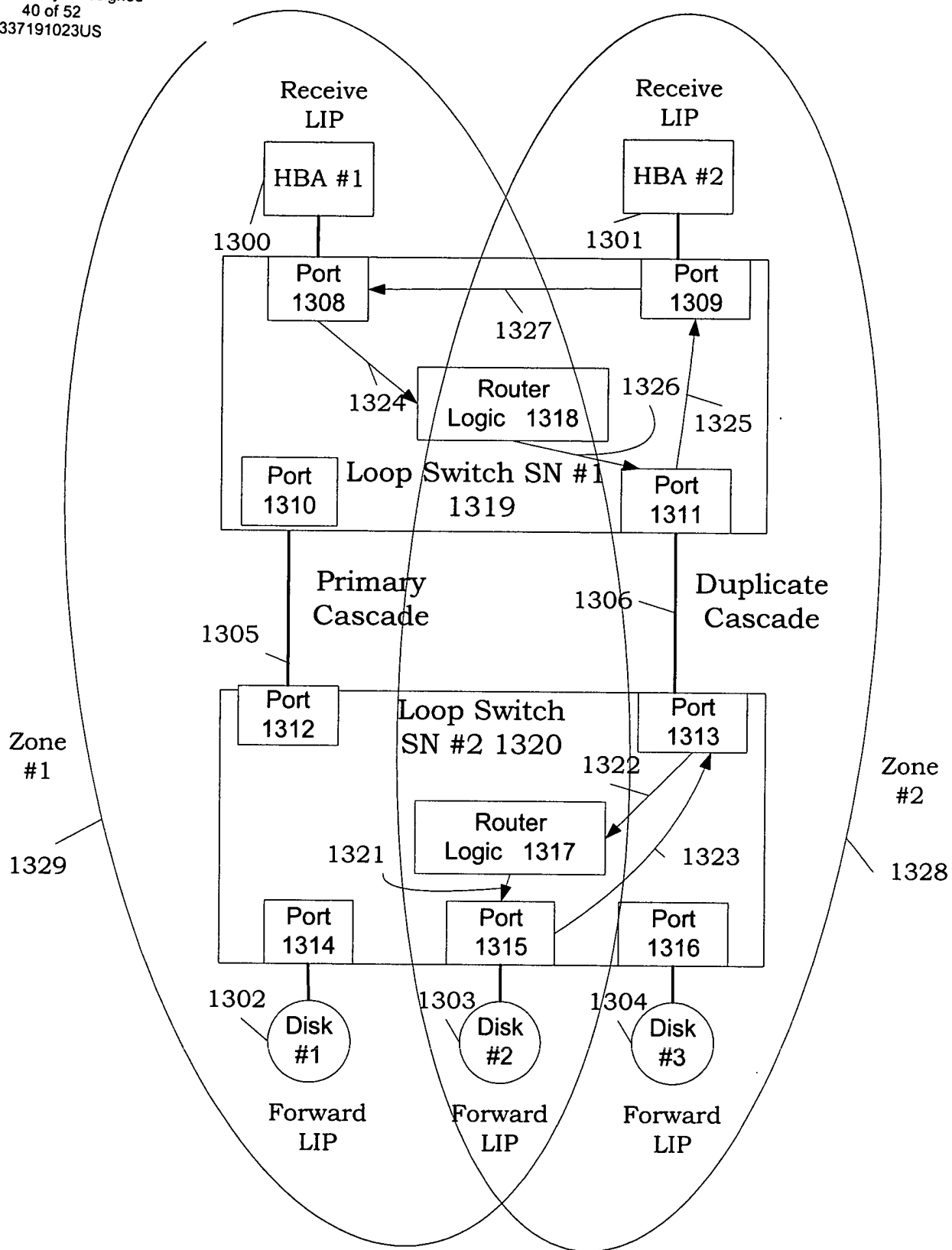


Fig. 23



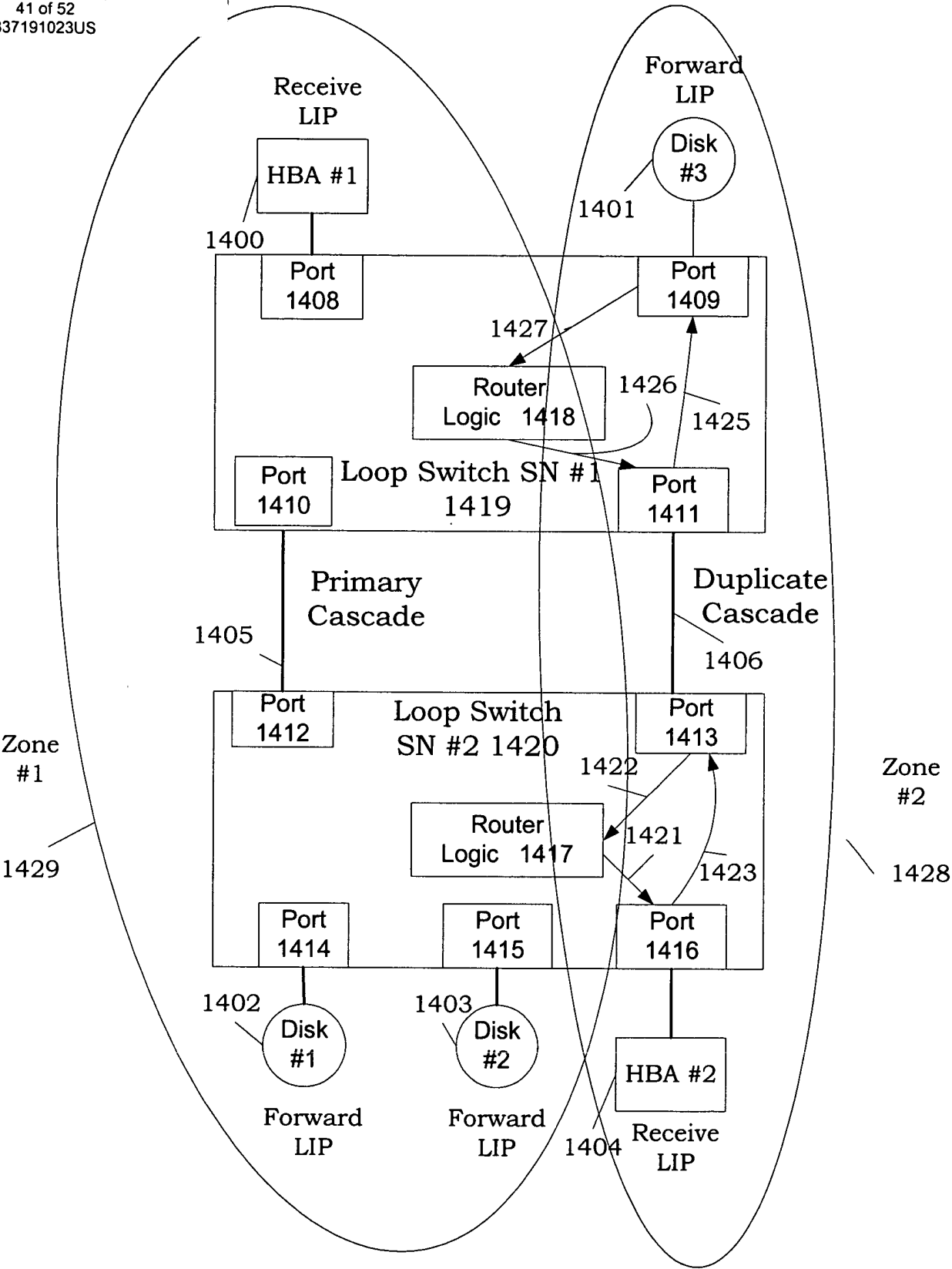


Fig. 24

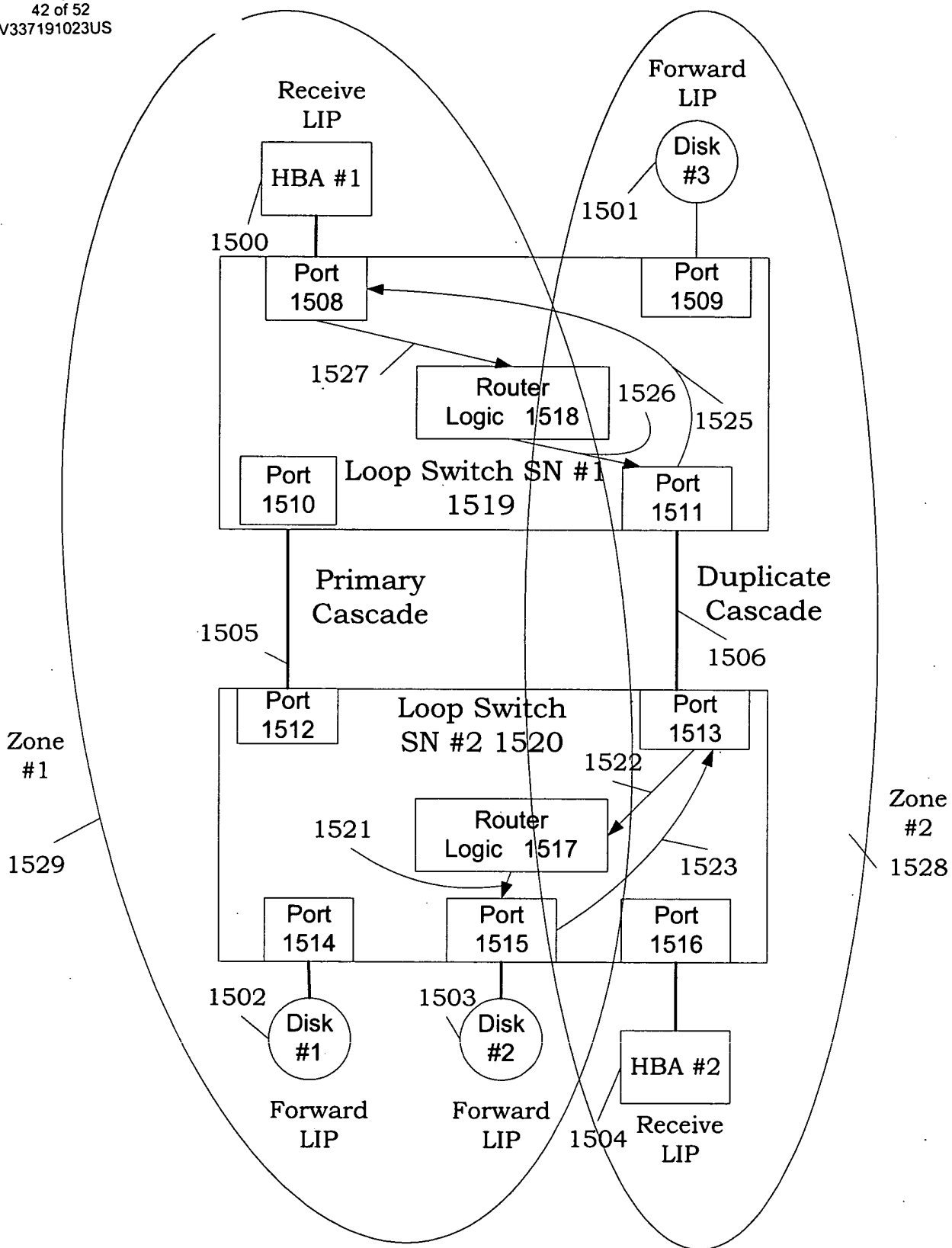


Fig. 25

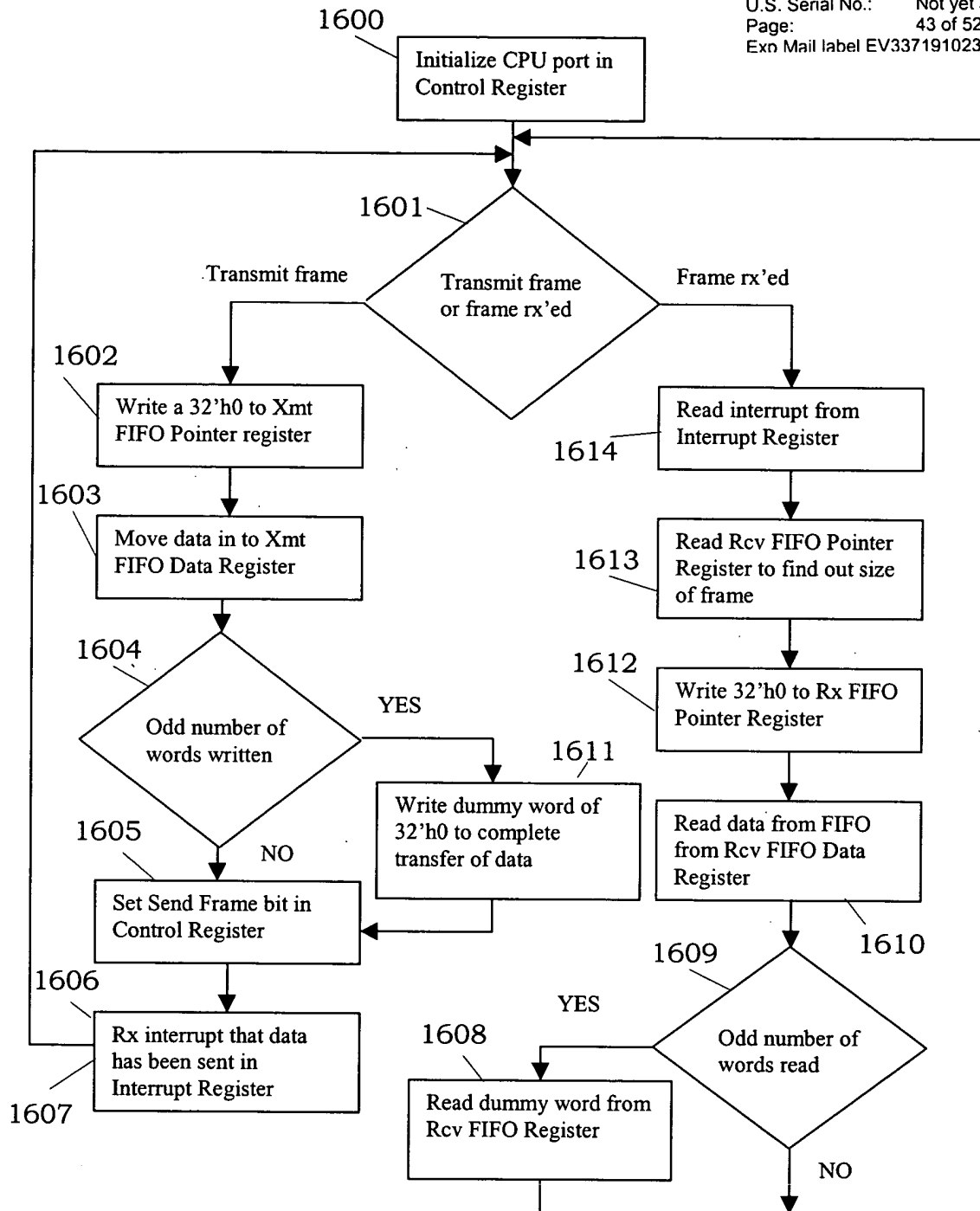


Fig. 26

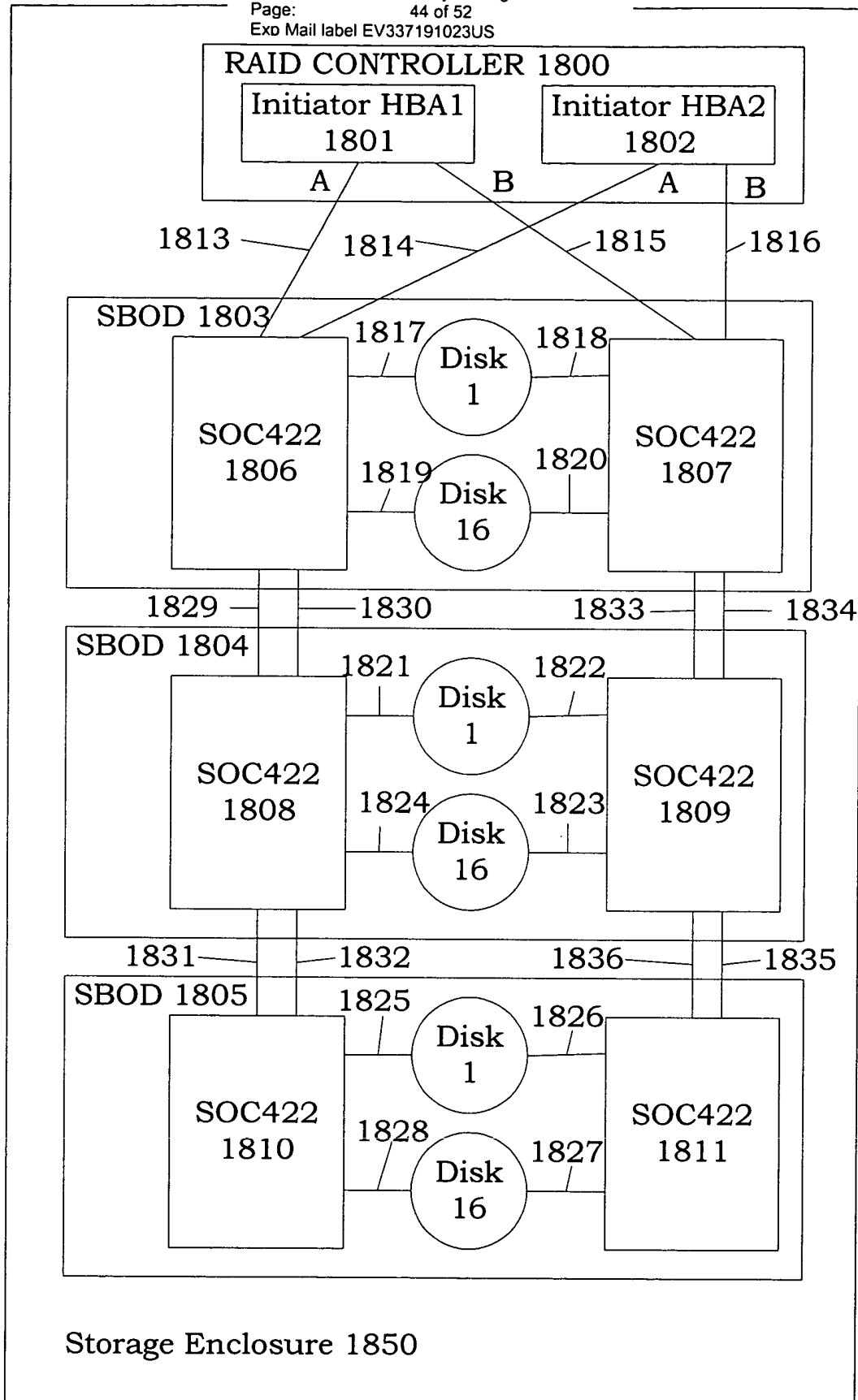
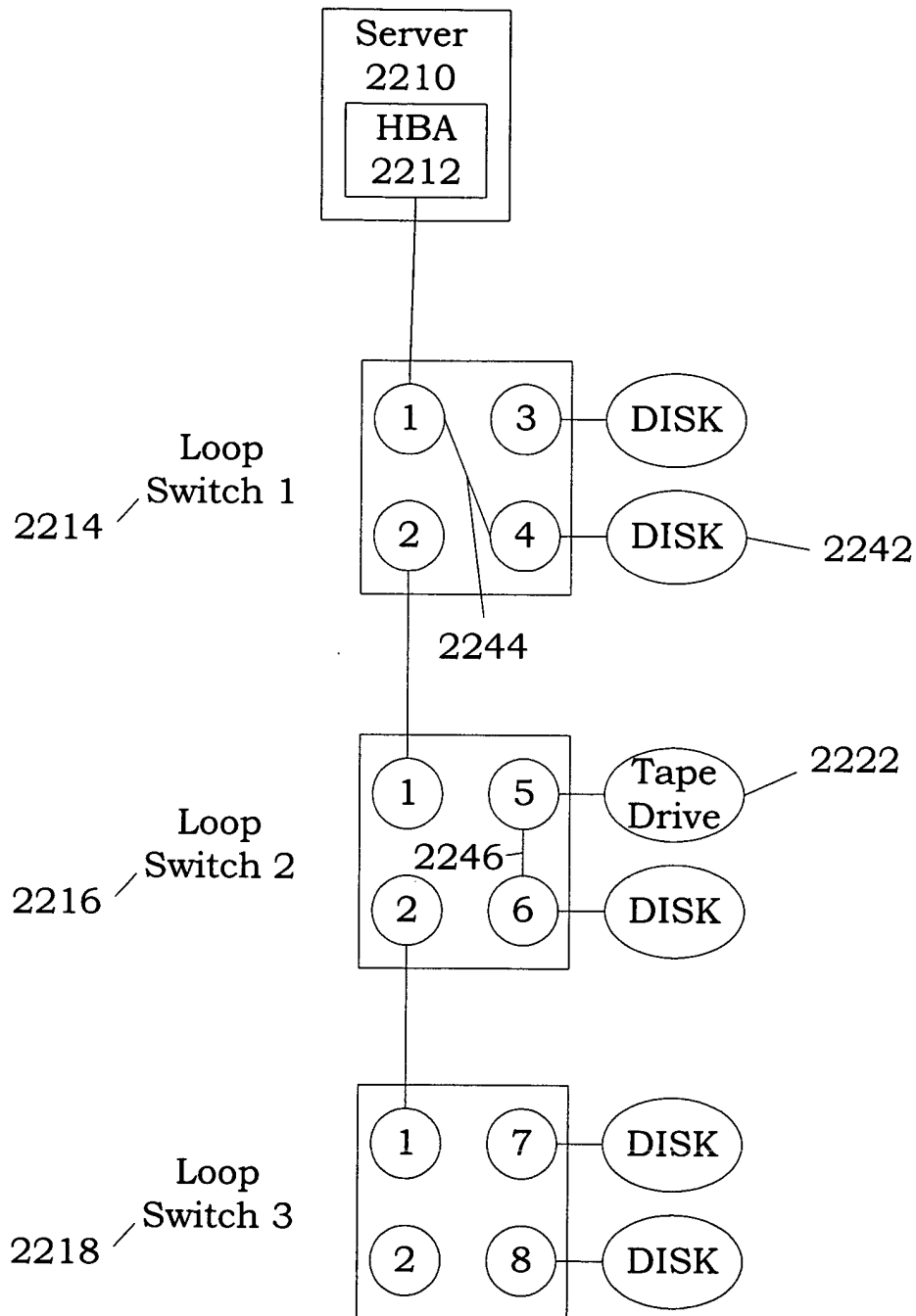


Fig. 27

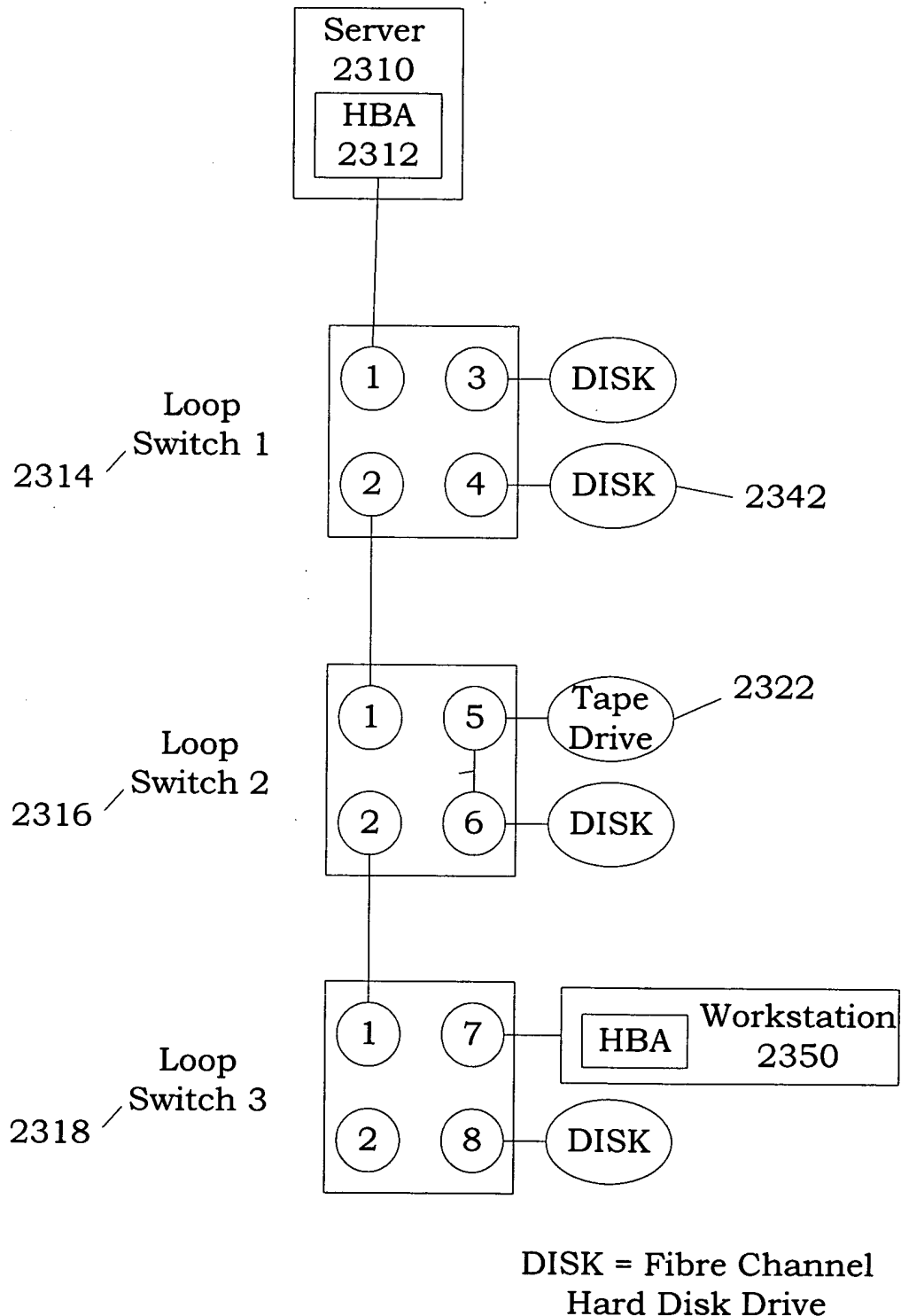






DISK = Fibre Channel  
 Hard Disk Drive

**Fig. 30**



**Fig. 31**



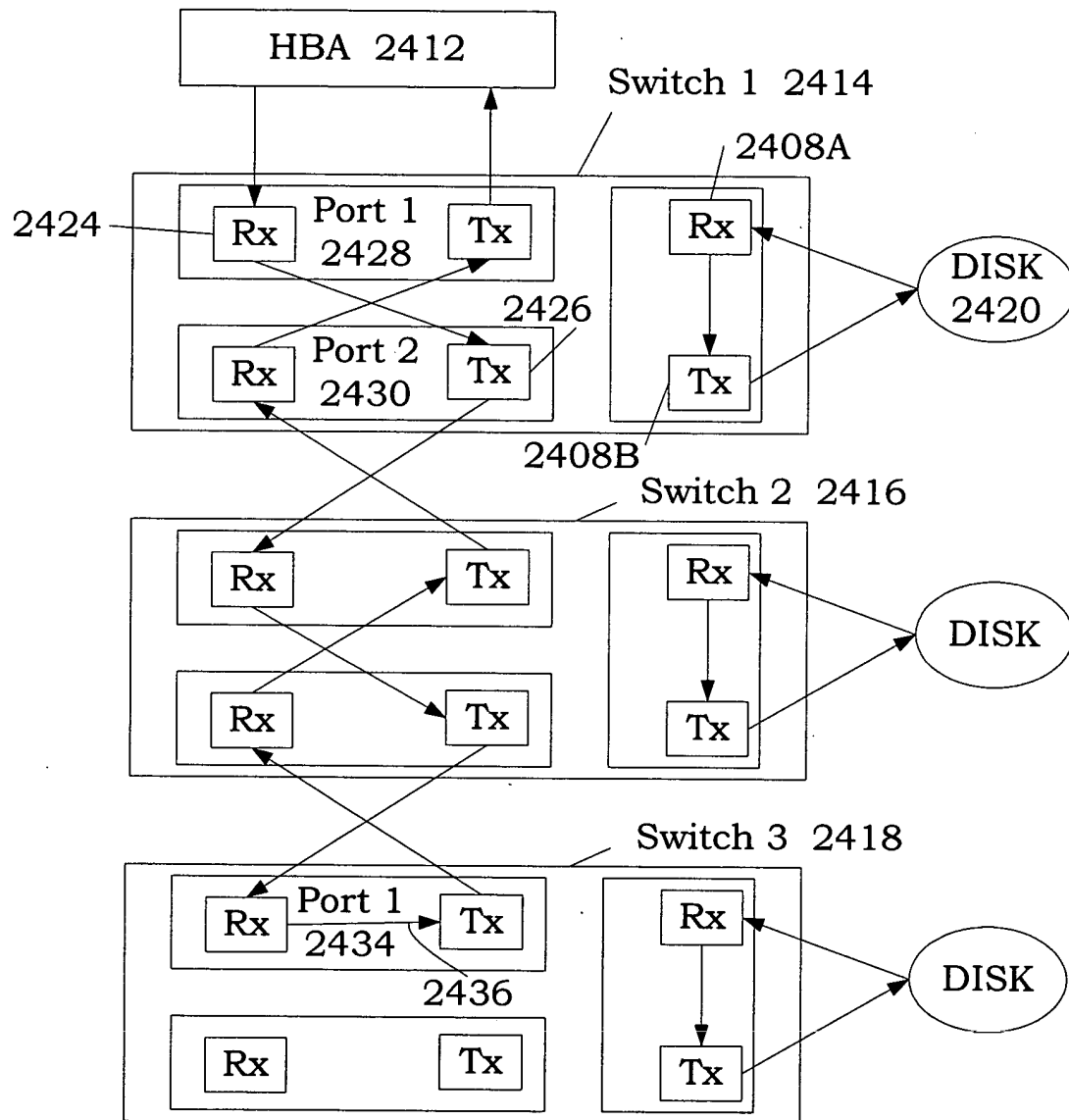


Fig. 32

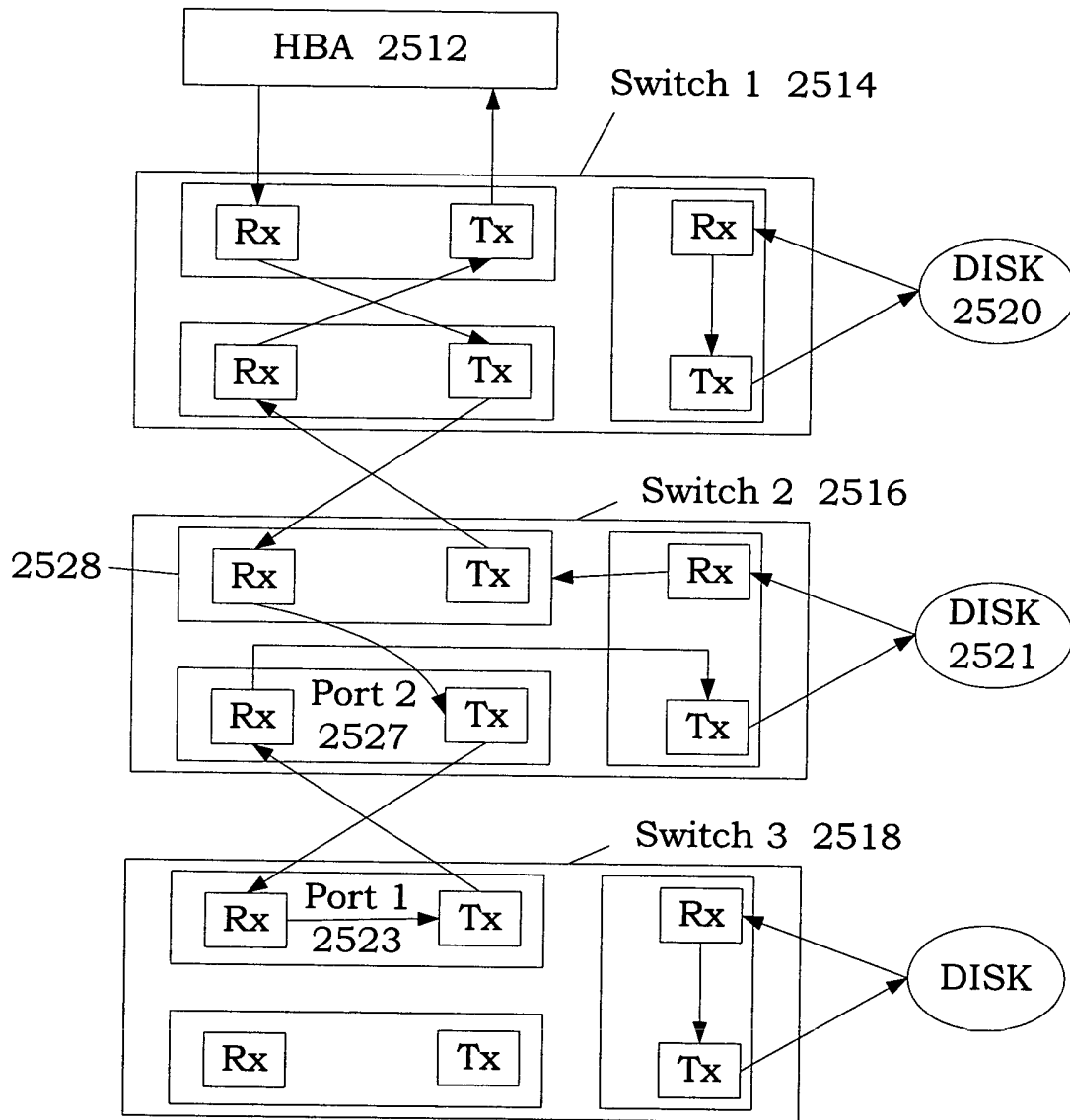


Fig. 33

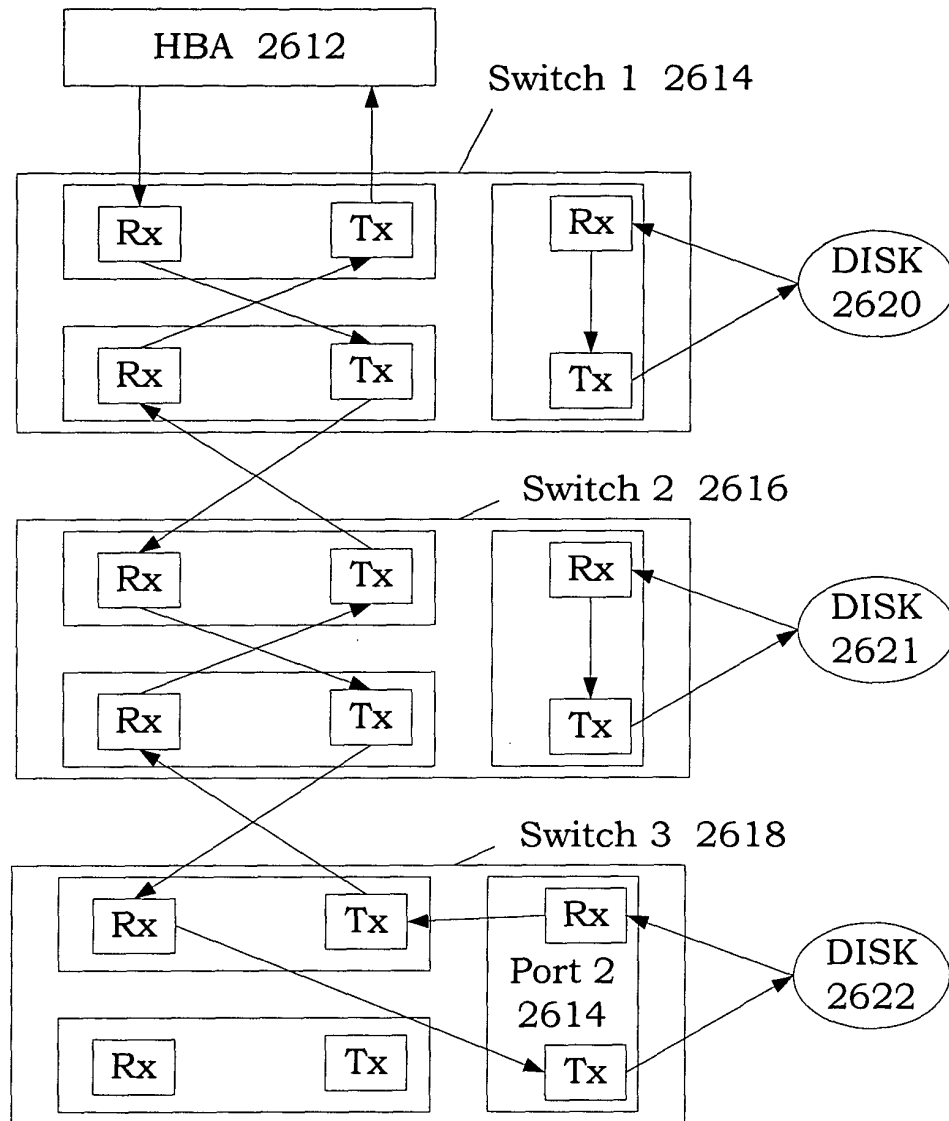


Fig. 34

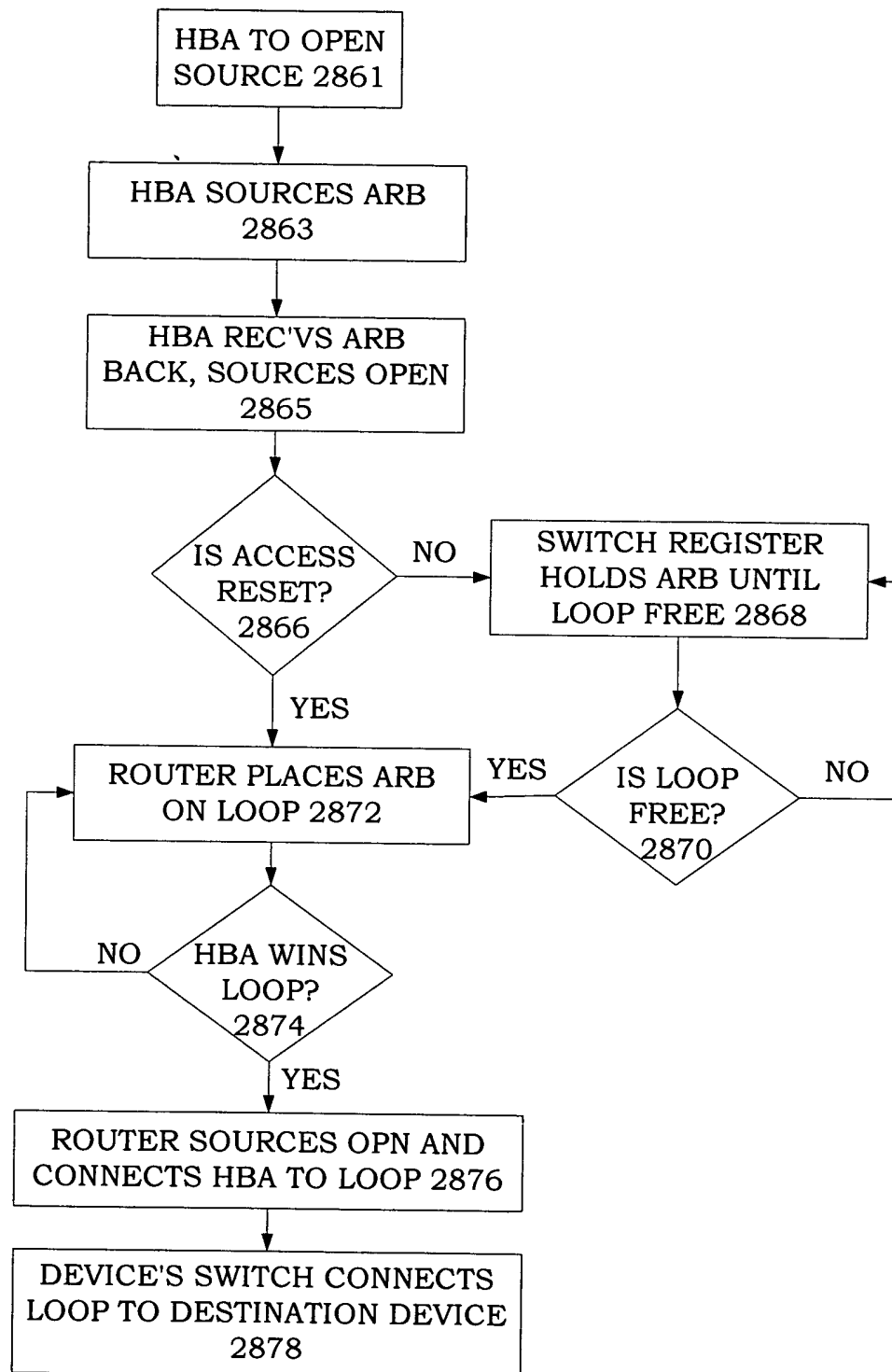


Fig. 35